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Are Telephone Polls Understating Support for Trump?

Little evidence that telephone versus online interviewing affects polling data on public support for key policy proposals

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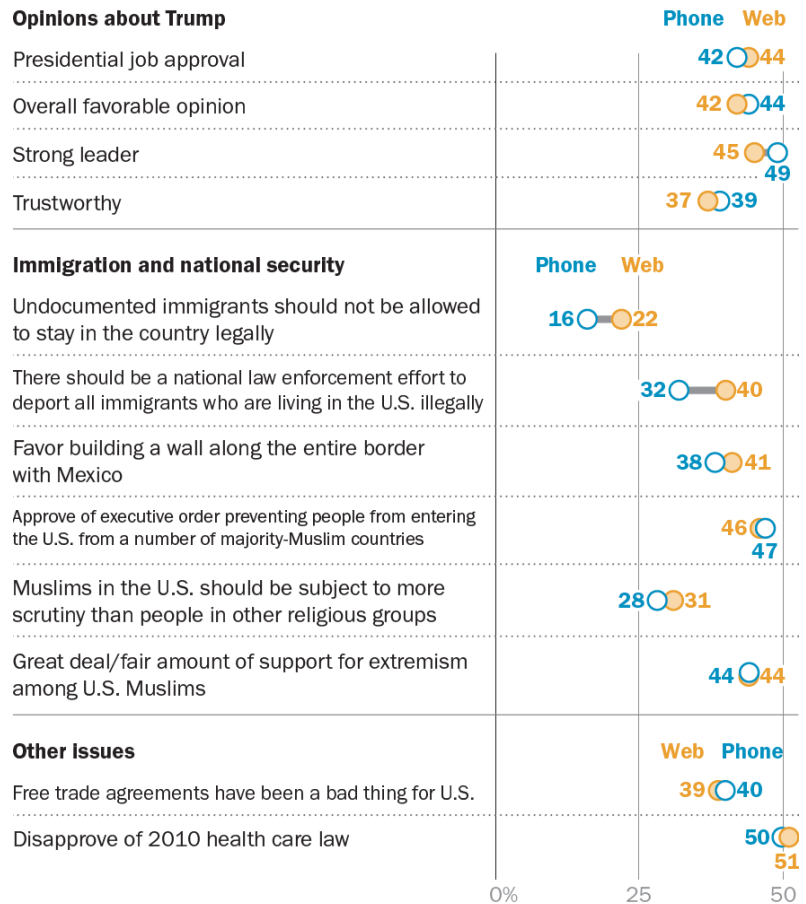# Are Telephone Polls Understating Support for Trump?

Little evidence that telephone versus online interviewing affects polling data on public support for key policy proposals

Five months after Donald Trump's victory in the 2016 election, public opinion polls find him with the lowest approval ratings of any president in modern history at this stage of a presidency. Given the [criticism](#) of election polling in 2016, it is reasonable to ask if public opinion polls are understating support for Trump and his policies.

Survey watchers have [posited several theories](#) for why election polls, and by extension post-election surveys, might underestimate backing for Trump. This report tackles one of the most common of these: the supposition that some people may be reluctant to tell an interviewer that they approve of Trump's job performance or policy proposals due to the fact that he remains a polarizing figure. If this is true, telephone surveys that use live interviewers would understate public support for the president's agenda. But there is another way to poll Americans: via the inherently more private method of web surveys. Self-administered online surveys should be less affected by any reluctance to reveal actual preferences.[1]

Mostly small differences by mode of interview

% giving answer in each survey mode

Opinions about Trump　　　　　　　　　　　　　　　Phone　Web

	Phone	Web
Presidential job approval	42	44
Overall favorable opinion	42	44
Strong leader	45	49
Trustworthy	37	39

Immigration and national security　　　　　　Phone　Web

	Phone	Web
Undocumented immigrants should not be allowed to stay in the country legally	16	22
There should be a national law enforcement effort to deport all immigrants who are living in the U.S. illegally	32	40
Favor building a wall along the entire border with Mexico	38	41
Approve of executive order preventing people from entering the U.S. from a number of majority-Muslim countries	47	46
Muslims in the U.S. should be subject to more scrutiny than people in other religious groups	28	31
Great deal/fair amount of support for extremism among U.S. Muslims	44	44

Other issues　　　　　　　　　　　　　　　　　　Web　Phone

	Web	Phone
Free trade agreements have been a bad thing for U.S.	39	40
Disapprove of 2010 health care law	51	50

0%　　　　25　　　　50

Note: Web sample size: 2,066; phone sample size: 1,778. Of the items shown, the only item with a statistically significant mode difference after multiple comparisons testing was the item titled "There should be a national law enforcement effort to deport all immigrants who are living in the U.S. illegally."
Source: Survey conducted Feb. 28-March 12, 2017.
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[1] Appendix B provides an overview of scientific research into the effect from mode of administration on survey results.

To examine the impact of interview mode on expressions of opinion about policies and political leaders, Pew Research Center conducted a large-scale survey experiment that compared responses to 27 questions fielded on both a telephone and a web survey. Of these questions, 13 addressed attitudes about Trump or policies closely associated with him; four measured impressions of other political figures (Vice President Mike Pence, former President Barack Obama, Sen. Elizabeth Warren and Russian President Vladimir Putin); and 10 tapped core political values. For this analysis, the pro-Trump or conservative response option of the question was used to compare estimates from the web versus phone groups.[2] The findings would be virtually unchanged if the anti-Trump or liberal response option had been used.

Overall, the survey experiment did not find significant mode differences in overall opinion about Trump or many of his signature policy positions. The web mode yielded estimates that were 1.8 percentage points more supportive of Trump and his policy positions, on average, than estimates from the phone mode.[3] The differences ranged from 0 to 8 percentage points. In total, four of the 27 differences observed were statistically significant using conventional testing for opinion polls.[4] And not all differences were in the direction one might expect based on the theory that people conceal their support for Trump and his policies in telephone interviews.

The two items that showed the largest difference between web and phone both focused on the policy treatment of undocumented immigrants. On two questions about this issue, web respondents expressed more support for deportation of undocumented immigrants than those interviewed by telephone.

That said, the big picture about where the public stands on Trump's signature policies is not dependent upon whether the poll was conducted online or by phone. Both modes tell the same story. Both find minority support for a wall along the entire Mexican border, minority support for the travel restrictions on certain majority-Muslim countries, minority support for a national law enforcement effort to deport immigrants living in the U.S. illegally and an essentially even split on attitudes toward the 2010 health care bill.

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[2] For items that include measures of intensity (e.g. "very" vs. "mostly" favorable), the net value for all pro-Trump or conservative response options (e.g., Net (very or mostly) favorable) was used for comparison across modes except where explicitly noted.

[3] The 1.8 percentage point figure is the average difference between the web group's estimate of the pro-Trump or conservative response option less the telephone group's estimate of that same response, for each of the 27 questions analyzed. The report focuses on this statistic, which is the average signed difference, because it reflects the motivating question of the study: to determine if telephone polls are under-estimating support for Trump and his policies and, if so, by how much. A slightly different statistic sometimes used in studies like this is the average absolute difference between the modes. That statistic is 2.7 percentage points for the 27 questions analyzed, though it is not the focus here because it ignores the motivating question for the study by treating differences in any direction as equally meaningful.

[4] Appendix C provides a discussion of the multiple comparisons issue, which arises in studies like this that make comparisons on a large number of questions. For this study, if a stricter testing approach is applied, (e.g., the Benjamini-Hochberg adjustment) only one question shows a statistically significant difference between the phone and web groups. In the interest of not downplaying the possibility of additional, real mode differences, analysis presented in this report uses the conventional testing approach, which flagged four of 27 questions as having significant differences by mode.

A look into which parts of the public were more or less affected by the mode shows that – on the questions examined – mode generally had a more pronounced effect on the responses from Republicans than on the responses from Democrats. It seems likely that this finding is specific to the policy and favorability questions asked in this study. There is no reason to conclude that mode effects are always going to be larger among people identifying with one particular political party.

This survey was conducted Feb. 28-March 12, 2017, using Pew Research Center's nationally representative American Trends Panel (ATP). Panelists were randomly assigned to either the phone mode (N=1,778 completed by phone) or the web mode (N=2,066 completed on the web). Phone mode respondents were called by professional interviewing staff following Pew Research Center's standard dialing protocol, in which up to seven attempts were made in order to complete the interview. The phone respondents and web respondents were independently weighted to be representative of the U.S. public. As a result, the web and phone groups were nearly identical with respect to partisanship, 2016 presidential vote and key demographic characteristics such as race, education, age, sex, urban-rural residence and region. This helps to ensure that any observed differences in estimates from the web versus phone groups are a consequence of the mode of interview itself and not because of underlying differences between the two sets of respondents.
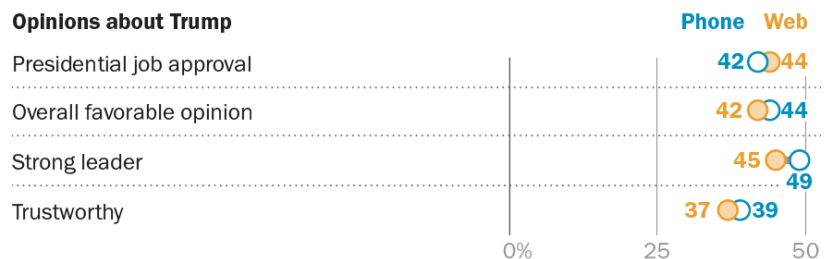
No real mode differences in opinions about Donald Trump

The study finds no significant difference by mode of interview on any of four key questions about Trump. Approval of the president's job performance differs by only 2 percentage points across the two survey modes (44% approve and 56% disapprove on the web; 42% approve and 55% disapprove on the phone), a difference that is not statistically significant. On the other three questions specifically about Trump, the mode difference goes in the other direction, with the phone estimates being slightly more positive about Trump than the web estimates (though, again, differences are not statistically significant).

Overall, 39% of those interviewed by phone said Trump is trustworthy, while 37% of those interviewed on the web did so. And on the question of whether Trump is a strong leader, 49% of those interviewed by phone and 45% of those interviewed online said that he is. These results are not consistent with the narrative that a substantial share of the public simply does not want to tell interviewers that they support Trump. Instead, they align with a previous Pew Research Center finding that people tend to express more positive views of political figures when responding on the phone than on the web.

Opinions about Trump largely consistent between web and phone

% giving answer in each survey mode

Opinions about Trump	Phone	Web
Presidential job approval	42	44
Overall favorable opinion	42	44
Strong leader	45	49
Trustworthy	37	39

Source: Survey conducted Feb. 28-March 12, 2017.
"Are Telephone Polls Understating Support for Trump?"

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Few differences by mode on signature Trump policies, except for deportation

Questions about immigration policy and immigrants displayed the largest mode differences in the expected direction (more support for the Trump administration's positions on the web), but not all such questions displayed mode of interview effects. While on both the web and phone a minority of adults say they favor a national law enforcement effort to deport all immigrants who are now living in the U.S. illegally, the share endorsing that position was significantly higher on the web (40%) than on the phone (32%). Similarly, while a minority of adults in both modes say that undocumented immigrants should not be allowed to stay in the country legally, there was greater support for that view when measured online (22%) than by phone (16%). Both of these differences are statistically significant.

At the same time, several other immigration and security-related items showed no appreciable differences between those who took the web survey and those who answered via phone. For example, there was only a 3-percentage-point mode difference in support for the proposed wall along the Mexican border and a similarly negligible gap on a question about whether Muslims living in the U.S. should be subject to additional anti-terrorism scrutiny.
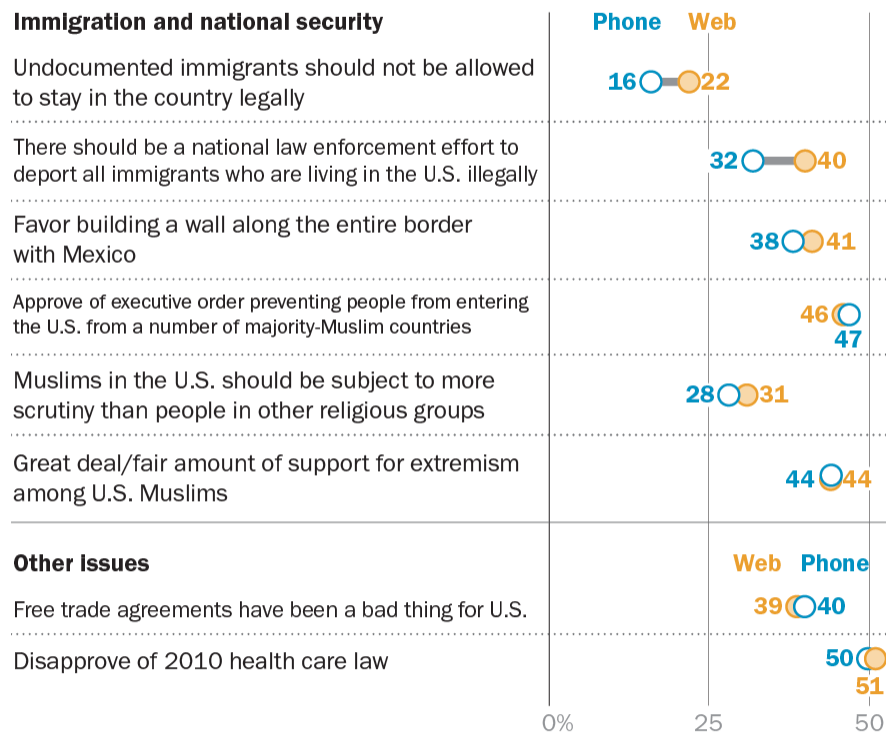
One other issue that touches on immigration is the Trump administration's executive order aimed at preventing people from a number of majority-Muslim countries from entering the U.S. The public overall is divided on this question, and there are large partisan divisions. But again, there is no difference in survey responses by mode of interview.

There were also no mode effects on Trump administration policy priorities on health care reform and trade agreements. Disapproval of the Affordable Care Act differed by only 1 percentage point between modes. And belief that free trade agreements have been a bad thing for the U.S. also had a 1-point difference by mode.

Little difference by mode in support for key policies, except for immigration

% giving answer in each survey mode

Immigration and national security — Phone / Web

	Phone	Web
Undocumented immigrants should not be allowed to stay in the country legally	16	22
There should be a national law enforcement effort to deport all immigrants who are living in the U.S. illegally	32	40
Favor building a wall along the entire border with Mexico	38	41
Approve of executive order preventing people from entering the U.S. from a number of majority-Muslim countries	47	46
Muslims in the U.S. should be subject to more scrutiny than people in other religious groups	28	31
Great deal/fair amount of support for extremism among U.S. Muslims	44	44

Other issues — Web / Phone

	Web	Phone
Free trade agreements have been a bad thing for U.S.	39	40
Disapprove of 2010 health care law	51	50

0%   25   50

Source: Survey conducted Feb. 28-March 12, 2017.
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On the long-standing poll question about the way things are going in the country, the study found no difference between web and phone responses. Just under a third of adults responding online (32%) and by phone (31%) reported being "satisfied" with how things are going nationally.

Mode influences ratings of Obama and the intensity of responses

The study also examined whether web versus phone administration influences favorability ratings of prominent political figures. In most cases the answer was no. The public's overall favorability ratings of Donald Trump, Mike Pence and Vladimir Putin were essentially the same when measured online or by phone. Ratings of Barack Obama, however, were significantly more positive on the phone than online (63% versus 57%, respectively, in overall favorability).

At first glance, the study also appears to show an effect from mode on ratings of Elizabeth Warren, whose favorability rating is 8 percentage points higher on the web than on the phone (45% versus 37%, respectively). A closer look, however, reveals that the result actually stems from a mode-based effect on the share providing a rating. Web respondents were presented with just four response options (ranging from very favorable to very unfavorable), and 8% of respondents proceeded to the next question without offering a rating. On the phone, respondents were read the same four answer choices but their responses were counted as "don't know" if they indicated that they had never heard of Warren, could not rate her or refused to answer. As a result, 18% of phone respondents did not provide a rating – more than double the rate on the web. If the analysis is restricted to adults providing a rating of Warren, then the mode effect essentially disappears (49% favorable on the

Positive and negative favorability ratings more intense online

% giving answer in each survey mode

		Very unfavorable	Mostly unfavorable	Very favorable	Mostly favorable	No answer
Donald Trump	Web	39	18	17	25	0
	Phone	35	21	15	29	0
Mike Pence	Web	26	26	19	25	3
	Phone	24	24	17	28	8
Elizabeth Warren	Web	23	24	15	31	8
	Phone	21	23	12	25	18
Barack Obama	Web	24	18	30	28	1
	Phone	18	18	25	37	1
Vladimir Putin	Web	44	34	2	15	5
	Phone	41	34	3	11	11

Note: Due to rounding, net favorable and net unfavorable estimates reported in the text may differ slightly from the sum of the constituent "very" and "mostly" categories in this graphic.
Source: Survey conducted Feb. 28-March 12, 2017.
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web versus 46% on the phone).

While a look at the net favorable ratings shows no effect from mode, there is a small but consistent effect when it comes to unfavorable ratings. Across all of the political figures, respondents were slightly more prone to expressing unfavorable views online than on the phone.

The battery of favorability questions also yielded another subtle pattern – adults responding online tended to express more *intense* ratings (both positive and negative) than those responding by phone. Averaging results across the five politicians, the share of adults expressing a "very unfavorable" opinion was 3 percentage points higher for the web group than the phone group (31% versus 28%, respectively). The study yielded the exact same result at the other end of the favorability spectrum. Across the five politicians, the average share expressing a "very favorable" opinion was 3 points higher for the web group than the phone group (17% versus 14%, respectively). Other mode-related work conducted by the Center found a similar result for very unfavorable ratings of six different political figures but no mode difference in very favorable ratings.

Mostly minor differences between web and phone results on political values questions
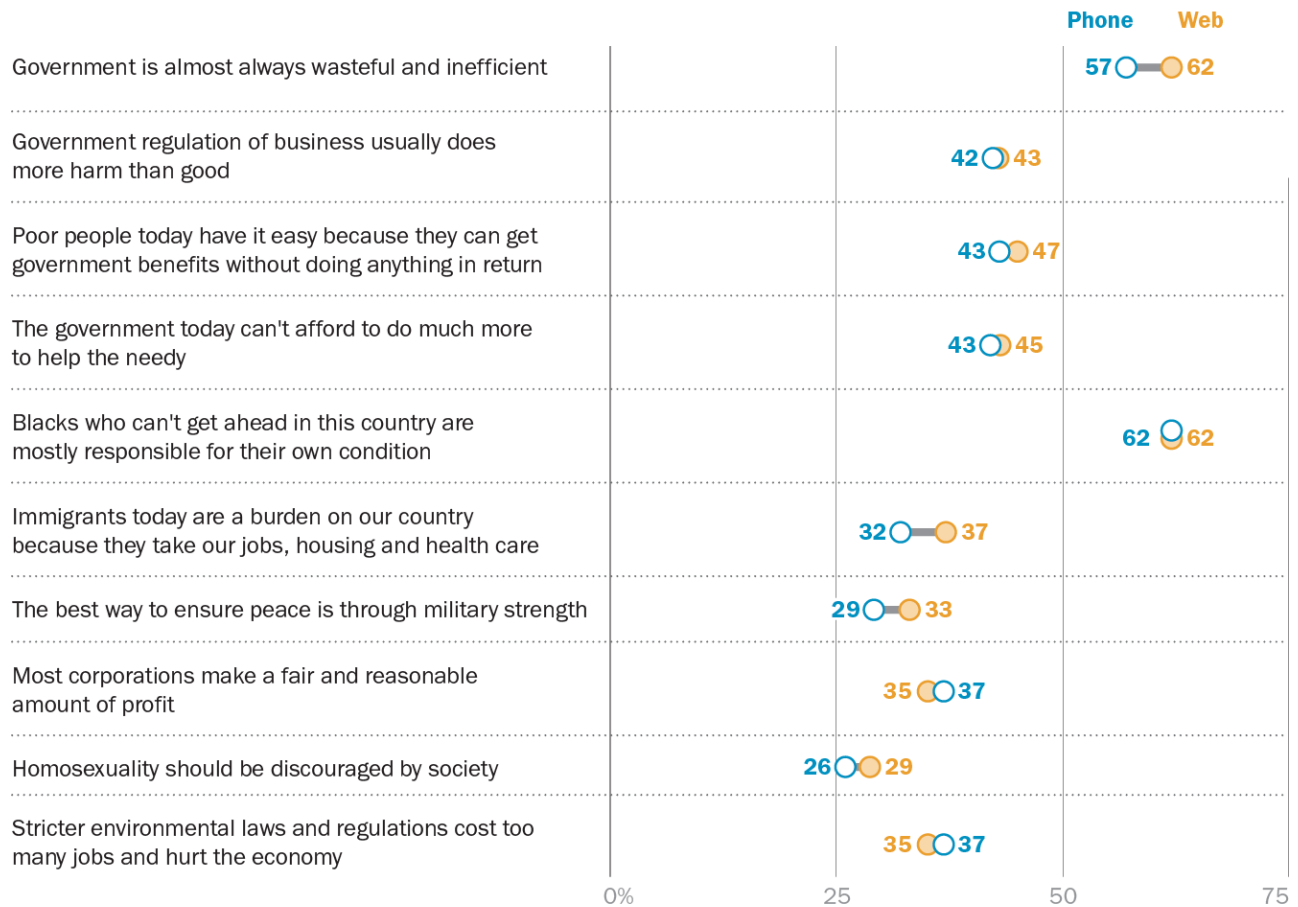
Pew Research Center has been measuring a set of important political values among Americans for the past three decades. This study measured 10 values that touch on views of government, the social safety net, regulation, the environment, immigration, business, race, homosexuality and the use of military force. These 10 values questions, which ask respondents to choose between alternative statements, were included in the mode experiment. (It's important to note that respondents are asked to choose which alternative comes closer to their own views, "even if neither is exactly right.")

Across the set of political values items, the average difference between the web and phone estimates on the conservative response option was 2.3 percentage points. Only one question showed a statistically significant difference when measured by web versus by telephone. Web respondents were 5 percentage points more likely than phone respondents to say that immigrants burden rather than strengthen the country.

A handful of other items showed smaller, non-statistically significant differences in the same direction. Those interviewed on the web were 5 points more likely than those interviewed on the phone to say that government is almost always wasteful and inefficient. And web respondents were 4 points more likely than phone respondents to say that the best way to ensure peace is through military strength.

Generally small effects from mode on political values

% giving answer in each survey mode

Phone   Web

	Phone	Web
Government is almost always wasteful and inefficient	57	62
Government regulation of business usually does more harm than good	42	43
Poor people today have it easy because they can get government benefits without doing anything in return	43	47
The government today can't afford to do much more to help the needy	43	45
Blacks who can't get ahead in this country are mostly responsible for their own condition	62	62
Immigrants today are a burden on our country because they take our jobs, housing and health care	32	37
The best way to ensure peace is through military strength	29	33
Most corporations make a fair and reasonable amount of profit	35	37
Homosexuality should be discouraged by society	26	29
Stricter environmental laws and regulations cost too many jobs and hurt the economy	37	35

0%   25   50   75

Source: Survey conducted Feb. 28-March 12, 2017.
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The other political values items yielded virtually the same results when measured online or by phone. This included questions about environmental laws, corporate profits, government assistance to the poor and government regulation of businesses.

Mode had a more pronounced effect on responses from Republicans than responses from Democrats on questions in this study

For questions that break heavily along party lines (e.g., opinion of the 2010 health care law), it is possible that an overall finding of no discernable mode effect masks important differences within the political parties.

Indeed, the study finds that the impact of the mode of interview differed somewhat by party on a number of estimates, including approval of Trump's job performance, personal impressions of Trump and Obama, opinion about the impact of immigrants on the country and opinion about the Affordable Care Act.
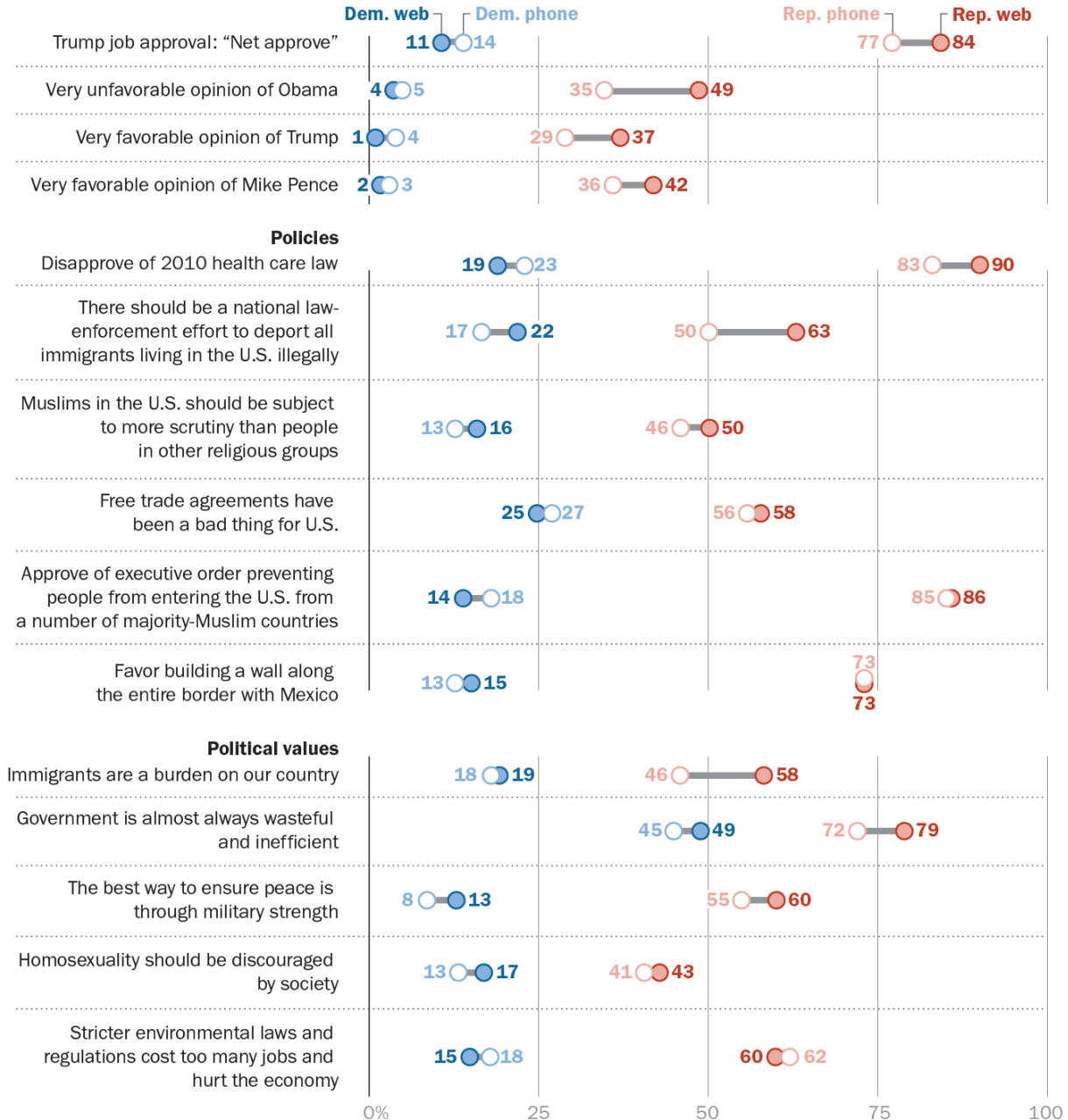
Among Republicans, including independents who lean Republican, Trump's job approval was 7 percentage points higher on the web than the phone. By contrast, his approval was little different on the web (11%) than the phone (14%) among Democrats and Democratic-leaning independents.

With respect to overall favorability – that is, the share who report holding either a "very favorable" or "somewhat favorable" opinion of Trump – there is little difference by mode for either Democrats or Republicans. However, the intensity of favorability differs considerably. Republicans on the web were 8 points more likely than those on the phone to offer a "very favorable" opinion of Trump (37% versus 29%, respectively); there was only a minor mode difference among Democrats on this category. On the other end of the scale, Democrats on the web were 9 points more likely than those on the phone to say they have a "very unfavorable" opinion of Trump (68% versus 59%, respectively); Republicans differed little by mode of interview.

A similar mode difference by party – in the opposite direction – occurred on favorability of Obama. Democrats interviewed on the web were 9 points more likely than those on the phone to say they had a "very favorable" impression of the former president, while there was little difference by mode among Republicans (very few held very favorable views of Obama). Conversely, Republicans on the web were 14 points more apt than those on the phone to say they have a "very unfavorable" opinion of Obama, while Democrats on the web and phone differed little on this category.

Mode tended to affect responses from Republicans more than those from Democrats

% giving answer in each survey mode

Dem. web ⌐ Dem. phone Rep. phone ⌐ Rep. web

Trump job approval: "Net approve"	**11** ● ○ 14			77 ○ ● **84**	
Very unfavorable opinion of Obama	**4** ● ○ 5	35 ○ ● 49			
Very favorable opinion of Trump	**1** ● ○ 4	29 ○ ● 37			
Very favorable opinion of Mike Pence	**2** ● ○ 3	36 ○ ● 42			

Policies

Disapprove of 2010 health care law	**19** ● ○ 23		83 ○ ● 90	
There should be a national law-enforcement effort to deport all immigrants living in the U.S. illegally	17 ○ ● **22**	50 ○ ● 63		
Muslims in the U.S. should be subject to more scrutiny than people in other religious groups	13 ○ ● 16	46 ○ ● 50		
Free trade agreements have been a bad thing for U.S.	25 ● ○ 27	56 ○ ● 58		
Approve of executive order preventing people from entering the U.S. from a number of majority-Muslim countries	14 ● ○ 18		85 ○ 86	
Favor building a wall along the entire border with Mexico	13 ○ ● 15		73 ○ ● 73	

Political values

Immigrants are a burden on our country	18 ○ ● 19	46 ○ ● 58		
Government is almost always wasteful and inefficient	45 ○ ● 49	72 ○ ● 79		
The best way to ensure peace is through military strength	8 ○ ● 13	55 ○ ● 60		
Homosexuality should be discouraged by society	13 ○ ● 17	41 ○ ● 43		
Stricter environmental laws and regulations cost too many jobs and hurt the economy	15 ● ○ 18	60 ● ○ 62		

0%   25   50   75   100

Source: Survey conducted Feb. 28-March 12, 2017.
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While three questions about immigration and immigrants produced significantly more

conservative overall results on the web than the phone, only one of them showed that the mode of interview clearly differed between Republicans and Democrats. Republicans interviewed on the web were more likely than those interviewed on the phone to agree with the statement that "immigrants today are a burden on our country because they take our jobs, housing and health care" (58% on the web, 46% on the phone); responses from Democrats did not differ by mode on this question.

A similar partisan pattern appeared on the question about the Affordable Care Act. Republicans on the web were 7 points more likely than those on the phone to say they disapprove of the law, while there is little mode difference in opinion among Democrats.

More generally, mode of interview appears to contribute to a slightly more polarized portrait of opinion about Democratic and Republican political figures, especially with respect to the expression of strong opinions. Mode effects on policy questions were more complicated. While the difference in opinion between Democrats and Republicans was larger among web respondents than phone respondents on a few questions, partisans were rarely pushed in opposite directions by the mode of interview.

Implications for polling

While no single study is definitive, these results strongly suggest that live interviewer telephone polls obtain results that are substantively equivalent to those in self-administered online polls on measures of opinion about Trump and his key policy positions – from the travel ban and health care to trade and the environment. This assumes that other factors, like sample source, are held constant. Policy toward undocumented immigrants is a notable exception, though even on this subject both telephone and online measurement produce similar conclusions about the broad contours of public opinion (that a minority of adults express conservative views on the issue).

While this study was not designed to address the question of whether telephone surveys in the 2016 general election or 2016 primaries understated Trump support because of respondents' reluctance to admit support for him, it does provide relevant evidence. Across four questions about the president, there was no consistent pattern of difference in overall responses by mode of interview, though Republicans on the web were somewhat more positive toward the president and his policies on immigration. But the timing of the study – conducted more than one month after Trump took office – and the fact that it was not focused on presidential vote means that it only indirectly speaks to the possibility of a "Shy Trump" phenomenon last year.

Acknowledgements

This report is a collaborative effort based on the input and analysis of the following individuals:

Methodology

The American Trends Panel, created by the Pew Research Center, is a nationally representative probability-based panel of randomly selected U.S. adults recruited from landline and cellphone random-digit dial (RDD) surveys. Panelists participate via monthly self-administered web surveys. Panelists who do not have internet access are provided with a tablet and wireless internet connection. The panel is managed by Abt SRBI.

Members of the ATP were recruited from two large, national landline and cellphone RDD surveys conducted in English and Spanish. At the end of each survey, respondents were invited to join the panel. The first group of panelists was recruited from a Center survey conducted Jan. 23 to March 16, 2014. Of the 10,013 adults interviewed, 9,809 were invited to take part in the panel and a total of 5,338 agreed to participate.[5] The second group of panelists was recruited from a Center survey conducted August 27 to October 4, 2015. Of the 6,004 adults interviewed, all were invited to join the panel, and 2,976 agreed to participate.[6]

Data in this report are drawn from the panel wave conducted Feb. 28-March 12, 2017.[7] A total of 3,844 panelists completed the survey. Of these, 2,066 were online and 1,778 were by phone. The margin of error for the web and telephone groups is plus or minus 3.7 and 4.0 percentage points, respectively.

Sampling errors and statistical tests of significance take into account the effect of weighting. Interviews are conducted in both English and Spanish, but the Hispanic sample in the ATP is predominantly native born and English speaking.

The following table shows the unweighted sample sizes and the error attributable to sampling that would be expected at the 95% level of confidence for different groups in the survey:

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[5] When data collection for the 2014 survey began, non-internet users were subsampled at a rate of 25%, but a decision was made shortly thereafter to invite all non-internet users to join. In total, 83% of non-internet users were invited to join the panel.

[6] Respondents to the 2014 survey who indicated that they are internet users but refused to provide an email address were initially permitted to participate in the ATP by mail, but were no longer permitted to join the panel after February 6, 2014. Internet users from the 2015 survey who refused to provide an email address were not permitted to join the panel.

[7] Data collection on Feb. 28, 2017, consisted of a web soft launch inviting 100 panelists to complete the survey and a CATI pretest that included 11 phone completes. The full launch for web and phone resumed on March 2, 2017, at 5 p.m. Eastern Standard Time. This pause in data collection was to minimize any potential impact that President Trump's Joint Session speech on the evening of Feb. 28 might have had on web completes since phone interviews were distributed more evenly throughout the field period.

Group	Unweighted sample size	Plus or minus ...
Total sample	3,844	2.7 percentage points
Web sample	2,066	3.7 percentage points
Phone sample	1,778	4.0 percentage points

Sample sizes and sampling errors for other subgroups are available upon request.

In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

The web component of the February 2017 mode effects study had a response rate of 80% (2,066 responses among 2,596 individuals sampled from the panel), while the phone component had a response rate of 69% (1,778 responses among 2,595 individuals sampled from the panel). Taking into account the combined, weighted response rate for the recruitment surveys (10.0%) and attrition from panel members who were removed at their request or for inactivity, the cumulative response rate for the wave is 2.4%.[8]

Ensuring the equivalence of web and phone groups

In order to be confident that any observed differences in responses between the web and phone groups are truly attributable to the difference in mode of administration, it was important that the groups be equivalent in their demographic and political profiles. One advantage of conducting this experiment with the ATP was the availability of numerous demographic and political variables that had been measured on the panel prior to this study. This data was leveraged in the design and analysis of the study to make sure that the two groups were as comparable as possible.

Panelists were assigned to take the survey either by telephone or online by stratifying the panel into blocks based on age, sex, education, race, language, party identification and whether they took ATP surveys by mail prior to the panel's transition to fully online data collection. Within each block, panelists were placed in a random order and assigned to either the web or phone groups in alternating sequence. This procedure, known as a randomized block design, helped to ensure that assignment to the web and phone groups was balanced on the dimensions used in the stratification.

Even though the mode of interview was assigned in a balanced fashion, it was still possible that certain kinds of people would be more likely to respond in one mode than the other. To correct any

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[8] Approximately once per year, panelists who have not participated in multiple consecutive waves are removed from the panel. These cases are counted in the denominator of cumulative response rates.

imbalances that may have occurred due to differential response, the web and phone groups were each weighted separately according to the ATP's standard weighting procedures. Each group was weighted in a multi-step process that begins with a base weight incorporating the respondents' original survey selection probability and the fact that in 2014 some panelists were subsampled for invitation to the panel.

Next, an adjustment was made for the fact that the propensity to join the panel and remain an active panelist varied across different groups in the sample. The final step in the weighting used an iterative technique that aligns the sample to population benchmarks on a number of dimensions. Gender, age, education, race, Hispanic origin and region parameters came from the U.S. Census Bureau's 2015 American Community Survey. The county-level population density parameter (deciles) came from the 2010 U.S. Decennial Census. The telephone service benchmark came from the January-June 2016 National Health Interview Survey and is projected to 2017. The volunteerism benchmark came from the 2015 Current Population Survey Volunteer

Composition of the mode of interview groups very similar after weighting

% total in each survey mode

	Male	Female
Web	49%	51%
Phone	49	51

	Ages 18-29	30-49	50-64	65+
Web	21	33	28	18
Phone	20	34	27	20

	College graduate+	Some college	H.S. graduate or less
Web	30	33	37
Phone	30	32	37

	White	Black	Hispanic	Other
Web	64	11	15	8
Phone	64	11	16	8

	Married	Not married
Web	47	53
Phone	48	52

	Internet user	Not internet user
Web	92	8
Phone	91	9

	Rep/lean Rep	Dem/lean Dem	DK/Ref.-no lean
Web	43	53	4
Phone	43	53	4

	Trump	Clinton	NET Other candidate/Ref.
Web	33	39	29
Phone	33	40	28

Source: Survey conducted Feb. 28-March 12, 2017.
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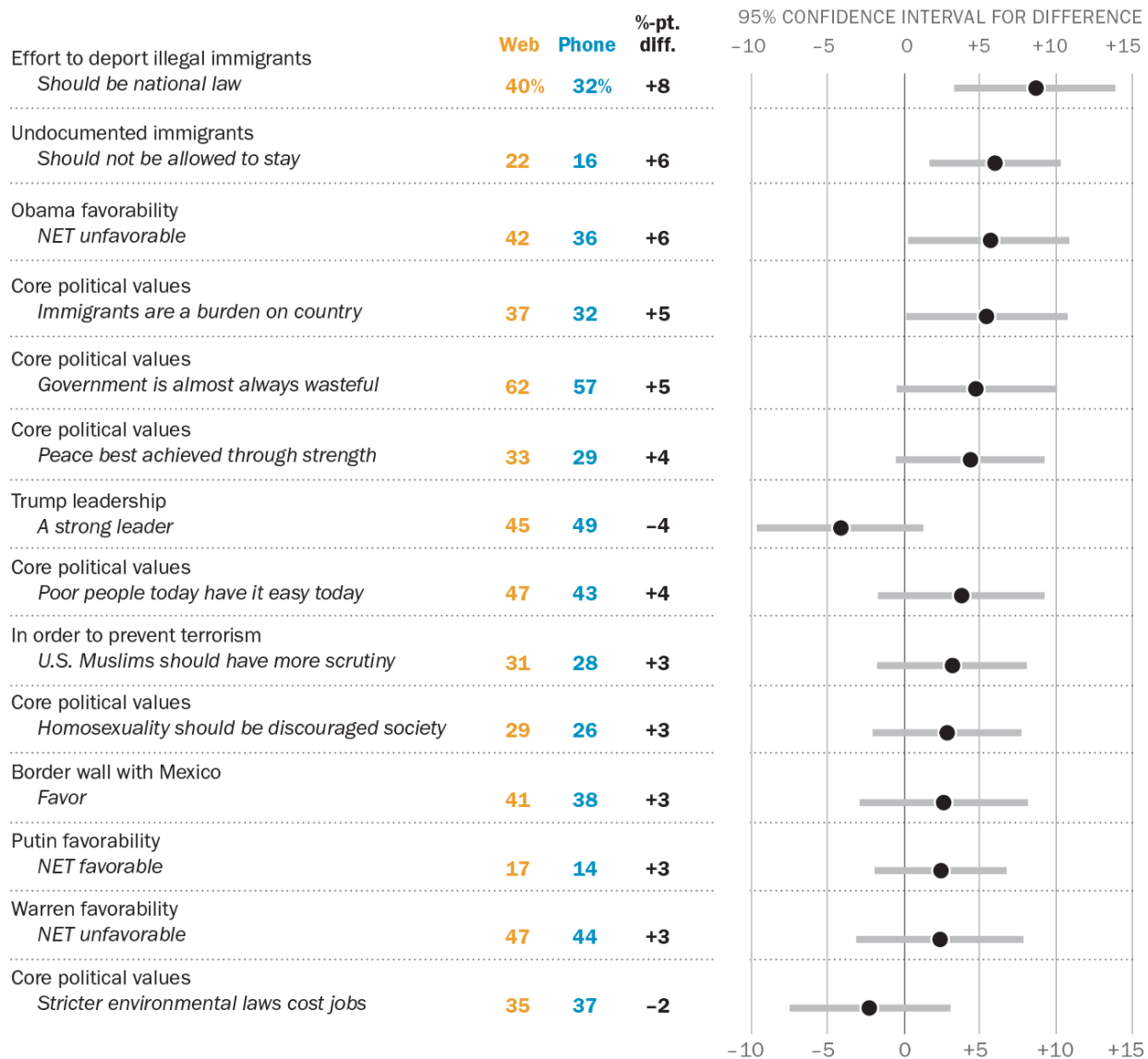
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Supplement. The party affiliation benchmark was the average of the results from the three most recent Pew Research Center general public telephone surveys. The Internet access benchmark came from a 2015 Center survey. Respondents who did not previously have internet access were treated as not having internet access for weighting purposes.

After the standard weights were applied to each group, there remained a slight imbalance between the web and phone groups in terms of candidate support in the 2016 presidential election. The measure was asked on the November 2016 ATP wave. To ensure that this difference did not induce spurious results, the web and phone groups were also weighted so that the shares who supported Clinton, Trump, other candidates or who did not respond to the November survey were equal across modes. The data were not weighted to match the actual election result, but rather to the distribution that was observed under the standard weighting procedure for the full sample (web and phone combined).

Appendix A: Summary of mode differences by question

Mode differences by question

% giving answer in each survey mode

	Web	Phone	%-pt. diff.
Effort to deport illegal immigrants *Should be national law*	40%	32%	+8
Undocumented immigrants *Should not be allowed to stay*	22	16	+6
Obama favorability *NET unfavorable*	42	36	+6
Core political values *Immigrants are a burden on country*	37	32	+5
Core political values *Government is almost always wasteful*	62	57	+5
Core political values *Peace best achieved through strength*	33	29	+4
Trump leadership *A strong leader*	45	49	−4
Core political values *Poor people today have it easy today*	47	43	+4
In order to prevent terrorism *U.S. Muslims should have more scrutiny*	31	28	+3
Core political values *Homosexuality should be discouraged society*	29	26	+3
Border wall with Mexico *Favor*	41	38	+3
Putin favorability *NET favorable*	17	14	+3
Warren favorability *NET unfavorable*	47	44	+3
Core political values *Stricter environmental laws cost jobs*	35	37	−2

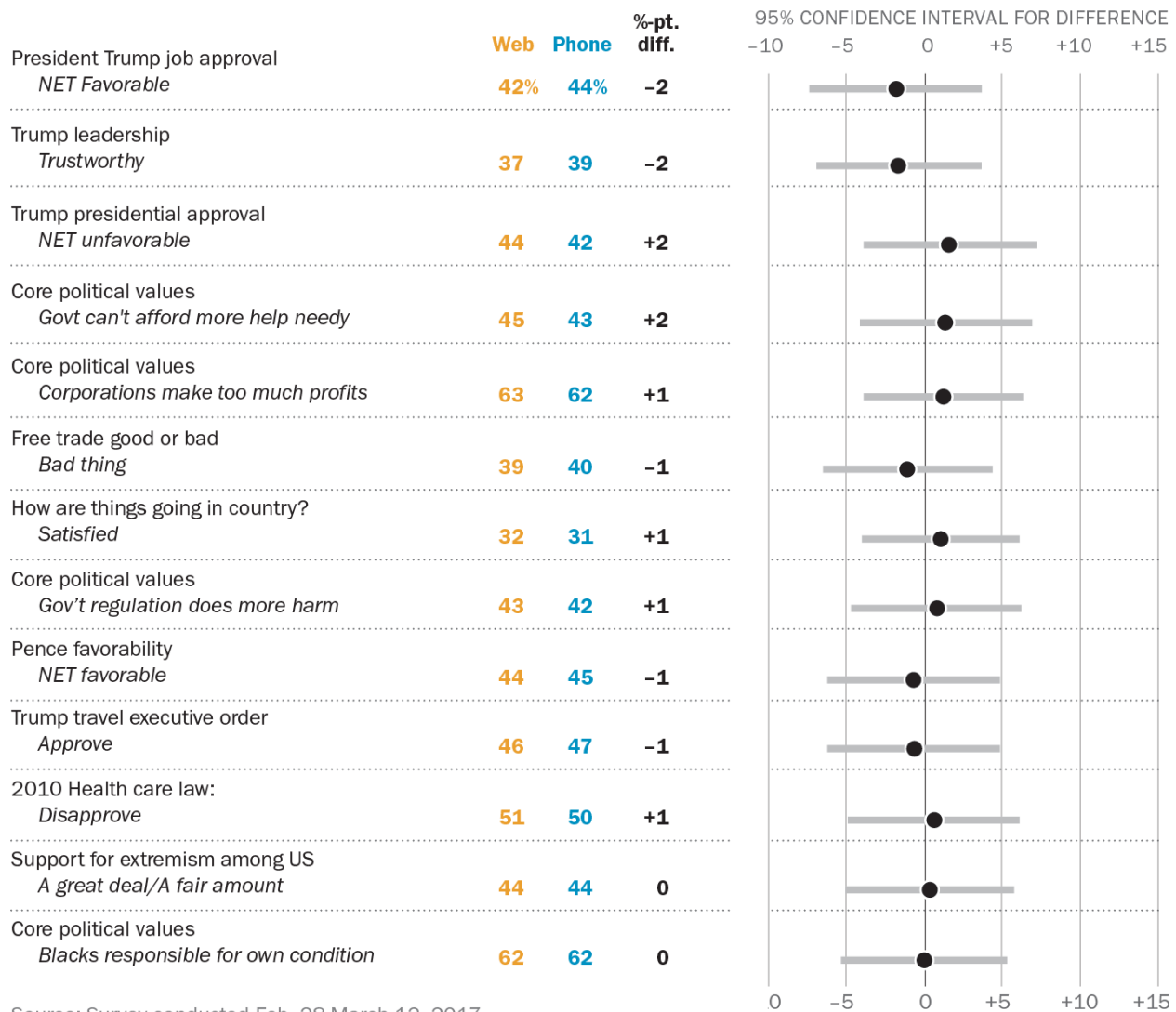95% CONFIDENCE INTERVAL FOR DIFFERENCE

Source: Survey conducted Feb. 28-March 12, 2017.
"Are Telephone Polls Understating Support for Trump?"

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Mode differences by question (continued)

% giving answer in each survey mode

	Web	Phone	%-pt. diff.
President Trump job approval *NET Favorable*	42%	44%	−2
Trump leadership *Trustworthy*	37	39	−2
Trump presidential approval *NET unfavorable*	44	42	+2
Core political values *Govt can't afford more help needy*	45	43	+2
Core political values *Corporations make too much profits*	63	62	+1
Free trade good or bad *Bad thing*	39	40	−1
How are things going in country? *Satisfied*	32	31	+1
Core political values *Gov't regulation does more harm*	43	42	+1
Pence favorability *NET favorable*	44	45	−1
Trump travel executive order *Approve*	46	47	−1
2010 Health care law: *Disapprove*	51	50	+1
Support for extremism among US *A great deal/A fair amount*	44	44	0
Core political values *Blacks responsible for own condition*	62	62	0

95% CONFIDENCE INTERVAL FOR DIFFERENCE

−10   −5   0   +5   +10   +15

Source: Survey conducted Feb. 28-March 12, 2017.
"Are Telephone Polls Understating Support for Trump?"

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Appendix B: Mode effects as a source of error in political surveys

Research suggests that the social interaction inherent in a telephone or in-person interview may exert subtle pressures on respondents that affect how they answer questions. The ways respondents change in response to these pressures is the basis of "mode studies" in social science.

For example, respondents may feel a need to present themselves in a more positive light when speaking to another human being rather than answers questions a computer, leading to an overstatement of socially desirable behaviors and attitudes and an understatement of opinions and behaviors they fear would elicit disapproval from another person. Previous research has shown this to be true in specific situations, with respondents understating such activities as drug and alcohol use and overstating activities like donating to charity or helping other people. This phenomenon is often referred to as "social desirability bias." These effects may be stronger among certain types of people than others, introducing additional bias into the results.

The existence of mode-of-interview effects in survey research is well-documented.[9] Pew Research Center published an extensive experiment on the subject in 2015, finding an average mode effect of about 5 percentage points across 60 questions on a wide array of topics. That study found evidence that very negative opinions about political figures are less likely to be expressed to an interviewer than in the relative anonymity of a self-administered online interview. In general, mode effects were more common on questions where respondents may have felt a need to present themselves in a more positive light to an interviewer. For example, some of the largest effects were observed on questions about experience with financial hardship. Low income respondents interviewed by phone were much less likely than those interviewed on the web to say they had trouble paying for food or affording medical care.

Mode effects are thought to be less common in surveys about politics, but there is evidence that they do occur.[10] Respondents interviewed by another person may be somewhat more likely to attempt to present themselves as "a good citizen" who votes and keeps up with public affairs. And certain political opinions on sensitive topics like race may be subject to social desirability bias. Considerable research has found that the race of the interviewer can affect responses to questions about racially sensitive topics. Given controversies surrounding Donald Trump during his campaign for president, it is possible that some people may be reluctant to admit that they support

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[9] For an overview of the effects of interviewer presence on answers to sensitive questions, see Tourangeau, Roger and Ting Yan. 2007. "Sensitive Questions in Surveys." Psychological Bulletin.

[10] Lynn Vavreck, "Survey Mode Effects: A Randomized Experiment." 2015. Presented at the annual meeting of the American Association for Public Opinion Research, Hollywood, Florida. http://www.aapor.org/AAPOR_Main/media/AnnualMeetingProceedings/2015/C1-2-Vavreck.pdf

him. If this is more likely to happen with a live interviewer than on the web, it might lead to telephone surveys understating support for him. It is difficult to know how sizeable this effect is, if it exists at all. A mode experiment by Morning Consult in December 2015 with Republicans in a non-probability sample found that Trump performed about 6 points better in a Republican nomination preference question online than in live telephone interviews. A second study using a similar methodology conducted with the general electorate in October 2016 found no overall mode effect in presidential vote intention among likely voters.

One clue might be found by looking at pre-election polls in 2016 and determining if surveys without interviewers were more accurate than those with interviewers in predicting support for Trump. The record is mixed on this, however. In the 2016 primaries, live telephone polls were at least as accurate – if not more so – than self-administered polls.[11] In the general election, live phone seemed to perform not quite as well as interactive voice response (IVR) but better than online polls in several state elections. Because the sampling frames used by IVR and live interviewer polls were different, it is difficult to attribute the greater accuracy of IVR to their ability to obtain more honest responses from voters.

Similarly, the comparable level of accuracy of online and live-interviewer pre-election polls is not incontrovertible proof of the absence of a mode of interview effect, since the two types of polls rely of very different sampling methods. Online polls were conducted largely with non-probability samples and live interviewer polls used random samples (either RDD of landline and cellphones, or random samples of records drawn from voter databases).

The current study addresses these issues by drawing respondents from a common pool of adults in the ATP and randomly assigning them a mode of interview. Because a great deal is known about the panelists, it is possible to assess the comparability of the resulting online and telephone samples and weight them accordingly to ensure that any observed differences are a result of the mode of interview and nothing else.

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[11] Silver, Nate. "The State of the Polls, 2016." https://fivethirtyeight.com/features/the-state-of-the-polls-2016/

Appendix C: Multiple comparisons adjustment

This study measured the effect of survey mode of administration on respondents' answer choices across 27 different questions about political figures, policy preferences and core political values. Looking at such a broad range of questions provides a great deal of insight into the kinds of items that could be adversely affected by the choice of survey mode, but it also introduces complexities that need to be addressed in the analysis. Specifically, the more comparisons one makes, the greater the likelihood of finding statistically significant results not because of any real underlying difference but simply because of random variability. If the threshold for statistical significance is set at the conventional p=0.05 level, on average we would expect to see one in 20 comparisons show up as significant, even if there were no real underlying effect. A common approach to addressing this problem of multiple comparisons is to increase the p-value of each test to account for the number of tests being performed, reducing the number of significant findings.

For this report, researchers chose not to adjust for multiple comparisons when discussing the experimental findings. However, when reserchers perform such an adjustment in this study using a technique known as the Benjamini-Hochberg procedure[12], the number of significant differences among the 27 primary mode comparisons drops from four to one[13]. Why then discuss unadjusted significance tests throughout this report? Although there are technical reasons to believe that such corrections are too conservative, the decision primarily has to do with the consequences of being wrong. In this case, it is preferable to err on the side of detecting potential sources of bias so that they can be subjected to additional research and scrutiny, even if some turn out to be overstated, than it is for problems to slip by undetected.

To this end, it is important not to confuse "significant" with "true" and "nonsignificant" with "false." Nonsignificant differences may represent effects that are real but small, and would require a larger sample size to measure with sufficient precision. Likewise, some results with p-values just under the 0.05 threshold could have easily been on the other side if random mode assignment or response had turned out slightly differently.

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[12] Benjamini, Yoav and Yosef Hochberg. 1995. "Controlling the false discovery rate: a practical and powerful approach to multiple testing." *Journal of the Royal Statistical Society Series* B 57, 289–300.

[13] Only the difference in the share of the U.S. adults who favor a national effort to deport all immigrants who are now living in the U.S. illegally remains statistically significant after adjusting for multiple comparisons.

2017 PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL

WAVE 24.5 MODE STUDY
FINAL TOPLINE
FEBRUARY 28-MARCH 12, 2017
TOTAL N=3,844[14][15]
WEB RESPONDENTS N=2,066[16]
PHONE RESPONDENTS N=1,778[17]

[RANDOMIZE POL1DT/POL1DTSTR and SATISF]
ASK ALL:
POL1DTDo you approve or disapprove of the way Donald Trump is handling his job as President?

ASK IF APPROVE OR DISAPPROVE (POL1DT=1,2):
POL1DTSTR   Do you [approve/disapprove] very strongly, or not so strongly?

	Feb 28-Mar 12, 2017		
Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
43	44	42	Approve
29	30	28	Very strongly
14	13	14	Not so strongly
55	56	55	Disapprove
43	43	42	Very strongly
13	12	13	Not so strongly
2	1	3	No Answer

ASK ALL:
SATISF   All in all, are you satisfied or dissatisfied with the way things are going in this country today?

	Feb 28-Mar 12, 2017		
Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
32	32	31	Satisfied
67	68	67	Dissatisfied
1	0	2	No Answer

ONE QUESTION HELD FOR FUTURE RELEASE

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[14] Question wording in this topline is that from the web version of the survey. For those questions asked on the phone, wording was adapted slightly when needed to reflect live-interviewer telephone survey methodology. Question wording for the phone version of the survey is available on request.

[15] Weights for these respondents allow them to represent the U.S. 18+ adult non-institutionalized population.

[16] Web respondents are panelists randomly assigned to answer the web mode. Weights for these respondents allow them to represent the U.S. 18+ adult non-institutionalized population.

[17] Phone respondents are panelists randomly assigned to answer the phone mode. Weights for these respondents allow them to represent the U.S. 18+ adult non-institutionalized population.

ASK ALL:

TRVLBAN   As you may know, Donald Trump recently issued an executive order that would temporarily prevent people from entering the U.S. from a number of majority-Muslim countries. Do you approve or disapprove of this action?[18]

Feb 28-Mar 12, 2017

Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
47	46	47	Approve
52	52	52	Disapprove
1	1	1	No Answer

FIVE QUESTIONS HELD FOR FUTURE RELEASE

ASK ALL:
[RANDOMIZE DTIMPRESSa AND DTIMPRESSc]:
DTIMPRESSa   Does Donald Trump impress you as trustworthy or not trustworthy?

Feb 28-Mar 12, 2017

Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
38	37	39	Trustworthy
61	62	60	Not trustworthy
1	1	0	No Answer

DTIMPRESSc   Does Donald Trump impress you as a strong leader or not a strong leader?

Feb 28-Mar 12, 2017

Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
47	45	49	A strong leader
52	55	50	Not a strong leader
1	1	1	No Answer

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[18] Changes to this question were made on Mach 2, 2017 at 1:51pm EST prior to the full launch. The word "recently" was initially not included and "a number of" previously specified the number seven. This change was made in anticipation of a revised executive order and to reasonably accommodate the uncertainty around the terms of the expected order.

ASK ALL:
IMMALLOW   Which comes closer to your view about how to handle undocumented immigrants who are now living in the U.S.? **[RANDOMIZE]**

Feb 28-Mar 12, 2017

Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
20	22	16	They should not be allowed to stay in the country legally
79	77	83	There should be a way for them to stay in the country legally, if certain requirements are met
1	1	1	No Answer

ASK ALL:
IMMDEPORT   Do you think there should be a national law enforcement effort to deport all immigrants who are now living in the U.S. illegally, or should that not be done?

Feb 28-Mar 12, 2017

Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
36	40	32	Should be national law enforcement effort to deport
62	58	66	Should not be national law enforcement effort to deport
2	2	2	No Answer

ASK ALL:
FAVWALL   All in all, would you favor or oppose building a wall along the entire border with Mexico?

Feb 28-Mar 12, 2017

Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
40	41	38	Favor
59	58	61	Oppose
1	1	1	No Answer

ASK ALL:
FREETRADE   In general, do you think that free trade agreements between the U.S. and other countries have been a good thing or a bad thing for the United States?

Feb 28-Mar 12, 2017

Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
56	57	53	Good thing
40	39	40	Bad thing
5	3	7	No Answer

ASK ALL:
ACAAPPRV   Do you approve or disapprove of the health care law passed by Barack Obama and Congress in 2010?

	Feb 28-Mar 12, 2017		
Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
48	48	48	Approve
51	51	50	Disapprove
1	1	2	No Answer

FIVE QUESTIONS HELD FOR FUTURE RELEASE

ASK ALL:
QFAV   What is your overall opinion of **[INSERT NAME, ONE NAME PER SCREEN, RANDOMIZE ITEMS a-e WITH e ALWAYS LAST]**?

	Feb 28-Mar 12, 2017	NET Favorable	*Very*	*Mostly*	NET Unfavorable	*Very*	*Mostly*	No Answer
a.	Donald Trump							
	Based on total [N=3,844]	43	*16*	*27*	57	*37*	*19*	0
	Based on web mode [N=2,066]	42	*17*	*25*	58	*39*	*18*	0
	Based on phone mode [N=1,778]	44	*15*	*29*	56	*35*	*21*	0
b.	Mike Pence							
	Based on total [N=3,844]	45	*18*	*26*	50	*25*	*25*	5
	Based on web mode [N=2,066]	44	*19*	*25*	52	*26*	*26*	3
	Based on phone mode [N=1,778]	45	*17*	*28*	47	*24*	*24*	8
c.	Elizabeth Warren							
	Based on total [N=3,844]	42	*14*	*28*	46	*22*	*24*	13
	Based on web mode [N=2,066]	45	*15*	*31*	47	*23*	*24*	8
	Based on phone mode [N=1,778]	37	*12*	*25*	44	*21*	*23*	18
d.	Barack Obama							
	Based on total [N=3,844]	60	*28*	*32*	39	*21*	*18*	1
	Based on web mode [N=2,066]	57	*30*	*28*	42	*24*	*18*	1
	Based on phone mode [N=1,778]	63	*25*	*37*	36	*18*	*18*	1

	NET Favorable	*Very*	*Mostly*	NET Unfavorable	*Very*	*Mostly*	No Answer
QFAV CONTINUED…							
e. Vladimir Putin							
Based on total [N=3,844]	16	2	13	77	43	34	8
Based on web mode [N=2,066]	17	2	15	78	44	34	5
Based on phone mode [N=1,778]	14	3	11	75	41	34	11

Now thinking about some issues…

ASK ALL:

TERRPRVNT   Which of the following comes closer to your view about the federal government's efforts to prevent terrorism **[RANDOMIZE]**?

Feb 28-Mar 12, 2017

Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
30	31	28	Muslims living in the U.S. should be subject to more scrutiny than people in other religious groups
69	67	70	Muslims living in the U.S. should NOT be subject to additional scrutiny solely because of their religion
2	2	2	No Answer

ASK ALL:

Next are some pairs of statements that will help us understand how you feel about a number of things. Please choose the statement that comes closer to your own views – even if neither is exactly right.

IDEOCONSIST   Please choose the statement that comes closer to your own views – even if neither is exactly right.

[SPLIT ITMES INTO TWO SCREENS, ITEMS a-f ON ONE SCREEN AND g-o ON ANOTHER, RANDOMIZE WITHIN EACH SCREEN]

	Feb 28-Mar 12, 2017	Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]
a.	Government is almost always wasteful and inefficient	60	62	57
	Government often does a better job than people give it credit for	39	37	42
	No Answer	1	1	1
b.	Government regulation of business is necessary to protect the public interest	56	55	57
	Government regulation of business usually does more harm than good	43	43	42
	No Answer	1	2	1

		Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]
IDEOCONSIST CONTINUED...				
c.	Poor people today have it easy because they can get government benefits without doing anything in return	45	47	43
	Poor people have hard lives because government benefits don't go far enough to help them live decently	53	52	54
	No Answer	*1*	*1*	*1*
d.	The government should do more to help needy Americans, even if it means going deeper into debt	54	54	55
	The government today can't afford to do much more to help the	44	45	43
	No Answer	*1*	*2*	*0*

NO ITEM e

f.	Racial discrimination is the main reason why many black people can't get ahead these days	36	36	36
	Blacks who can't get ahead in this country are mostly responsible for their own condition	62	62	62
	No Answer	*1*	*1*	*1*
g.	Immigrants today strengthen our country because of their hard work and talents	62	60	65
	Immigrants today are a burden on our country because they take our jobs, housing and health	35	37	32
	No Answer	*2*	*2*	*1*
h.	The best way to ensure peace is through military strength	31	33	29
	Good diplomacy is the best way to ensure peace	67	65	69
	No Answer	*1*	*2*	*0*
i.	Business corporations make too much profit	63	63	62
	Most corporations make a fair and reasonable amount of profit	36	35	37
	No Answer	*1*	*2*	*0*

NO ITEMS j-l

	Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]
IDEOCONSIST CONTINUED…			
m. Homosexuality should be accepted by society	70	69	72
Homosexuality should be discouraged by society	27	29	26
No Answer	*2*	*3*	*1*
NO ITEM n			
o. Stricter environmental laws and regulations cost too many jobs and hurt the economy	36	35	37
Stricter environmental laws and regulations are worth the cost	62	63	62
No Answer	*1*	*2*	*1*

ASK ALL:
EXTRMSPRT   In your opinion, how much support for extremism, if any, is there among Muslims living in the U.S.?

Feb 28-Mar 12, 2017

Based on total [N=3,844]	Based on web mode [N=2,066]	Based on phone mode [N=1,778]	
10	9	11	A great deal
34	36	33	A fair amount
44	45	44	Not much
9	8	10	None at all
3	3	3	No Answer

THREE QUESTIONS HELD FOR FUTURE RELEASE