Social desirability bias and polling errors in the 2016 presidential election

Andy Brownback⁎, Aaron Novotny

Department of Economics, University of Arkansas, United States

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ABSTRACT

Social scientists have observed that socially desirable responding (SDR) often biases unincentivized surveys. Nonetheless, media, campaigns, and markets all employ unincentivized polls to make predictions about electoral outcomes. During the 2016 presidential campaign, we conducted three list experiments to test the effect SDR has on polls of agreement with presidential candidates. We elicit a subject’s agreement with either Hillary Clinton or Donald Trump using explicit questioning or an implicit elicitation that allows subjects to conceal their individual responses. We find evidence that explicit polling overstates agreement with Clinton relative to Trump. Subgroup analysis by party identification shows that SDR significantly diminishes explicit statements of agreement with the opposing party’s candidate driven largely by Democrats who are significantly less likely to explicitly state agreement with Trump. We measure economic policy preferences and find no evidence that ideological agreement drives SDR. We find suggestive evidence that local voting patterns predict SDR.

1. Introduction

Political polls generate sweeping economic and political consequences far in advance of election day. Polling numbers motivate changes in campaign spending, staff deployment, fundraising efforts, and even policy positions. Strong polling numbers, for example, motivated Hillary Clinton’s 2016 campaign to forgo campaigning in certain states in the upper Midwest that her opponent, Donald Trump, subsequently won. Polls play a structural role in winnowing television debate participants (Fox News, 2016), help voters evaluate the viability of candidates, and influence electoral turnout (Bursztyn et al., 2017; Agranov et al., 2017). Polls also have direct economic consequences by influencing forecasts about the future business environment (Kantchev and Whittall, 2017). As a result, market prices fluctuate in response to polling (Wolfers and Zitzewitz, 2016) and election results that polls suggested were unlikely “shock” prices in predictable ways (Wagner et al., 2017). Proponents of prediction markets cite their decreased volatility as an advantage over traditional polling (Wolfers and Zitzewitz, 2004; Rothschild, 2009). Nonetheless, these markets respond to new polling information, exposing them to the risk of similar surprises.

Since an incentive-compatible method of collecting voting preferences would be infeasible—and illegal in most cases—methods that rely on stated preference between candidates have been accepted as viable, second-best alternatives. Critics of polling typically point to its vulnerability to non-response bias and optimism bias (Pew Research Center, 2012; Armstrong, 2001). But social science research offers several other reasons that the assumption of truthful revelation in poll responses may be dubious. Since (Maccoby and Maccoby, 1954) and (Edwards, 1957), social scientists have known that these stated preference surveys are subject to “socially desirable responding” (SDR, hereafter)—that is, respondents tend to conceal preferences that are not perceived to be socially desirable. Researchers have identified SDR in many social, political, and economic contexts.1 For example, feelings toward African-American politicians (Heerwig and McCabe, 2009; Redlawsk et al., 2010; Stephens-Davidowitz, 2014), female politicians (Streb et al., 2008), and Jewish politicians (Kane et al., 2004) are affected by SDR. Brown-Iannuzzi et al. (2018) found that respondents conceal discriminatory political preferences only when it is “socially inappropriate” to discriminate against the group in question. SDR also has been shown to influence the expression of sentiments surrounding immigration (Janus, 2010), same-sex marriage (Powell, 2013; Lax et al., 2016; Coffman et al., 2016), and race (Krysan, 1998).

In contrast to other research that analyzes secondary data, our paper analyzes data collected with the express purpose of identifying the effect of SDR on candidate polling. We cover both telephone and online

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Corresponding author.

E-mail addresses: abrownback@walton.uark.edu (A. Brownback), anovotny@walton.uark.edu (A. Novotny).

1 Paulhus (1984); Droitcour et al. (1991); Fisher (1993); Rudman and Kilianski (2000); Karlan and Zinman (2012).

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environments using a methodology designed specifically to test for SDR in responses to questions about agreement with Clinton and Trump. Other researchers have addressed the role of SDR in the 2016 election in different ways. Claassen and Ryan (2016) use two forms of indirect questioning asking about the perceptions of support for each candidate to measure the influence of SDR on the 2016 election, finding little or no influence of SDR. Coppock performs a list experiment similar to ours and finds no evidence of SDR affecting Trump support. Coppock has key differences from our study: it is exclusively online, does not compare the effect of SDR across both candidates, and repeats a question about voting intentions that was asked earlier in the survey. A Morning Consult study offers an in-depth analysis comparing responses to telephone and online polls to find a small but not statistically significant increase in support for Trump in online polls (Dropp, 2015). Other analyses have re-analyzed traditional polls to assert that SDR provided no significant threat to the validity of traditional polls.

Our results contradict the conclusions of polling agencies and data journalists and show marginally significant evidence that SDR causes polling respondents to understate their agreement with Trump and overstate their agreement with Clinton. We decompose our sample by political party and find that SDR causes a large and significant drop in the willingness of voters to state agreement with the opposing party’s candidate. Additionally, we find that, while the effect of SDR is closely related to party identification, it is unrelated to political ideology. That is, SDR is closely tied to the party a voter has chosen but is unrelated to policy preferences that may have driven him or her to that party.

With historically high candidate unfavorable ratings (Enten, 2016a), the 2016 presidential election provides optimal conditions under which SDR could threaten the validity of political polls. Moreover, the voting bases of each party also report historically high levels of partisanship (Andris et al., 2015; Pew Research Center, 2016). This allows us to understand how SDR interacts with a divided electorate.

We use three list experiments (a method sometimes called the “item count” or “unmatched count” technique) to estimate the effect of SDR on political polling. This method was developed by Miller (1984) to understand the ways in which respondents predictably misreported answers to incentivized polling questions. In a list experiment, subjects are presented with a list of statements and asked to report the total number with which they agree. Half of the subjects are assigned to the Implicit treatment in which their list features five statements, including a “sensitive” statement of interest. The other half of the subjects are assigned to the Explicit treatment; this list consists of the same four non-sensitive statements in the same order and is followed by a direct “Yes” or “No” question about the sensitive statement. Thus, all respondents face the same five statements, but the treatment assignment randomly varies the observability of an individual’s response to the sensitive statement. Blair and Imai (2012) and Costange (2008) validate and formalize the analysis and methodology of list experiments. Critical to the validity of this methodology is the restriction that only socially undesirable responses be affected. Tsuchiya et al. (2007) and Coffman et al. (2016) use placebo tests to validate the methodology.

Fig. 1 displays our Implicit and Explicit elicitations. The first two experiments measure the SDR associated with statements of agreement with presidential candidates. The final experiment tests for a differential effect of economic policy preferences on the SDR associated with each candidate. In all three experiments, subjects are randomly assigned to the Implicit or Explicit treatment and then are presented with a sensitive statement that asks about agreement with a presidential candidate. Experiment 1—a live telephone poll of 800 Arkansas residents—elicits responses to the statement, “I often find myself agreeing with Donald Trump.” In Experiments 2 and 3—online surveys with approximately 1000 eligible voters each—we randomly assign subjects to respond to either 1) “I often find myself agreeing with Hillary Clinton” or 2) “I often find myself agreeing with Donald Trump.”

It is important to note that our sensitive statement does not ask which candidate respondents intend to vote for, but simply asks if subjects “often agree” with a randomly assigned candidate. This accomplishes two objectives: 1) It prevents us from repeating a question that was previously asked explicitly in the telephone poll and 2) It

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**Fig. 1. Examples of both Explicit and Implicit elicitations of support for Donald Trump.**

<table>
<thead>
<tr>
<th>Implicit:</th>
<th>Explicit:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider the following list of statements. Below, we will ask how many of the statements you agree with.</td>
<td>Consider the following list of statements. Below, we will ask how many of the statements you agree with.</td>
</tr>
<tr>
<td><img src="image" alt="List of statements" /></td>
<td><img src="image" alt="List of statements" /></td>
</tr>
<tr>
<td>How many of the previous statements do you agree with?</td>
<td>How many of the previous statements do you agree with?</td>
</tr>
<tr>
<td>(0)</td>
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<td>(5)</td>
<td>(5)</td>
</tr>
</tbody>
</table>

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2 All analysis is run within a polling medium to control for medium-specific effects.

3 We elicited “agreements” with candidates because the telephone poll already included a question about voting intentions. We believe that the desire for consistency may bias our design away from finding SDR in this case. 85% of our sample in the Arkansas Poll indicated plans to vote for the candidate they “agreed with,” making this a strong instrument for voting behavior. We maintained this measure in our online replication.

4 For example, Enten (2016b); Conner et al. (2016); Shepard (2016).

5 In 1969, Richard Nixon referred to the “silent majority” of people who concealed their support for the Vietnam War. Similarly, the “Bradley effect” was a hypothesized reluctance among voters to reveal their votes against Tom Bradley were racially motivated. In Great Britain, a similar theory has been labeled the “Shy Tory Factor.”

6 A similar method was proposed in Raghavarao and Federer (1979).

7 We are choosing to use the terms “implicit” and “explicit” to indicate whether or not the respondent openly revealed preferences for candidates. These should not be confused with similar terms from psychological research. Indeed, our terms are more similar to “indirectly” and “directly” revealed preferences.

8 Miller and Kronick (1998) find that the ordering of candidates can influence voter behavior. Thus, we chose to hold all ordering constant to provide a valid comparison between the two treatments.
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