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NEW STUDY FINDS BATTLEGROUND STATE POLLING WORKED UNTIL 2012 ELECTION

Excluding cellphone-only voters from poll surveys in last election skewed results to GOP

ALEXANDRIA VA, JUNE 15, 2015 – A statistical analysis of poll performance in battleground states over the last three presidential elections shows polling firms produced estimates that were fairly accurate in 2004 and 2008, but underestimated support for President Obama in 2012, a new article reports.

The article's authors—Ole J. Forsberg and Mark E. Payton, professors in the department of statistics at Oklahoma State University—believe the culprit for bad polling in the 2012 election may have roots in "outdated and possibly flawed sampling methodology" that resulted in state-focused polls overestimating support for Republican candidate Mitt Romney.

In the article—published on the website of <u>Statistics and Public Policy</u>, an online, open-access journal of the American Statistical Association (ASA)—the authors used a new statistical model they developed that incorporates statewide polling information as well as past and present national polling data to arrive at more accurate estimates of a candidate's level of support in each state.

Forsberg and Payton write in "<u>Analysis of Battleground State Presidential Polling Performances, 2004–2012</u>" the country's cellphone culture may be the culprit for the shortcomings of the 2012 election polling results.

"Increasingly, U.S. citizens, and therefore potential voters, are relying solely on cellphones and not maintaining landlines in their homes," write Forsberg and Payton. "According to Marketing Charts, the percentage of households that solely relied on wireless phones from 2008 to 2011 increased from 17.5% to 34.0%. During the same period, the percentage of households with a landline decreased from 79.1% to 63.6%."

Further, a U.S. Centers for Disease Control and Prevention (CDC) study conducted in 2011 estimates that 38% of all American adults and almost 40% of all households have cellphone service but no landline. This estimate is up from approximately 8% just five years earlier.

Separately, a 2013 CDC report shows the rate of cellphone-only (CPO) households is inconsistent across demographic groups. For instance, those in the 18–24 age group are more likely to be CPO (54%) than those in the 35–44 (44%), 45–64 (30%) and 65 and over (12%) age groups. Meanwhile, the poor more than the not-poor (55% to 35%), those living in metropolitan areas more than those in non-metropolitan locations (40% to 32%) and people in the Northeast less than all people in other regions combined (27% to 40%) are likely to be CPO.

Forsberg and Payton point out that prior research has determined CPO households tend to lean toward Democratic candidates. In 2010, the Pew Research Center found three of four election polls conducted that year produced estimates showing slightly more support for Republican candidates and less support for Democratic

candidates, resulting in differences of four to six points. This finding has implications on the quality of all polling results and will get worse in the future as more U.S. homes become CPO.

Additionally, exit polls conducted during the 2012 presidential election suggest the Democratic leaning of CPO households is increasing. For instance, the 18–29 age group voted 60% for President Obama, while only 44% of those 65 and over did so. Also, the poor were more likely to vote for the president than the rich (60% to 44%). "This evidence of support for President Obama suggests his supporters were less likely to be contacted by polling firms than were Romney supporters," write Forsberg and Payton.

The issue for pollsters is calling landlines is easier and less costly. To protect cellphone users from paying for unsolicited calls, current law requires pollsters to dial cellphone numbers manually (conversely, landlines can be reached via computer-generated dialing), explained the authors.

The duo believes the effect of CPO households on poll estimates has become significant. Accordingly, they recommend sampling methodology be adjusted to reflect the new realities and account for a segment of the CPO voting population that tends to vote for Democratic candidates but currently is not included in the sampled population.

"In recent years, the number of landlines has decreased, while the population has increased. Today's youth are more likely to be without a landline than are the elderly. Thus, landline ownership may no longer be independent of political persuasion. This bias needs to be better used in election estimates," they urged.

"The finding that CPO households tend to be more Democratic and less Republican shows the importance of adjusting poll estimates to reflect this difference," write Forsberg and Payton.

The duo studied state polling because they believe it is the best resource to predict the outcome of a presidential election. They encourage the media and public to focus on polling in battleground states—those states that will determine the winning candidate in the Electoral College—to better understand public preference in presidential candidates.

"During any presidential election year, considerable attention is paid to political polls. While many members of the media tend to focus on national polls to determine the pulse of the voting public, of more importance in determining the candidate with the electoral edge is evaluating how the candidates are preferred in so-called 'swing states' or 'battleground states,'" Forsberg and Payton write.

About Statistics and Public Policy:

Statistics and Public Policy was launched in late 2013 by the ASA and offers a fresh, data-analytics take on major public policy issues. It features papers that apply effective statistical methodology to problems in the public policy and political science arenas. Its editorial emphasis is on statistical applications, rather than methodological novelties. Taylor & Francis is its publisher.

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