

The paper is interesting. It tried to show that with proper adjustment technique, non-representative polls could also predict the presidential election as accurately as those traditional representative polls do. The paper took an Xbox survey as an example. As is shown in the graph, the characteristics of respondents of Xbox survey are really different from those who vote. The least representative variables were sex (Over 75% male in Xbox survey compared to less than 50% male in 2012 Exit Poll), age (Over 50% 18~29 in Xbox survey compared to less than 25% 18~29 in 2012 Exit Poll) and education (About 50% college graduate in Xbox survey compared to about 30% college graduate in 2012 Exit Poll) (Wang, Rothschild, Goel, & Gelman, 2015, p.982). However, there were also representative variables. The most representative variables were race, state and 2008 vote.

The paper used an adjustment technique called multilevel regression and post-stratification (MRP) to deal with the data. It used the 2008 Xbox survey dataset and exit poll data from 2008 presidential election vote to perform a post-stratification re-weighting of the respondents (Wang et al., 2015, p.984).

Compared Xbox raw (unweighted) data, Pollster.com forecast data, and Xbox post-stratified data, it's easy to find that while raw data seemed to be extremely different from Pollster.com forecast data in some characteristics and voter intents. Meanwhile, distributions of all variables in Xbox post-stratified data were almost the same to post-stratified data, and the MRP-adjusted voter intent of two-party Obama support over the 45-day period is much closer to that of Pollster.com

forecast data. For the prediction, the Xbox raw data would have predicted that Romney would win ,for the two-party Obama support rate was almost always below 50% in the graph, in contrast, both Pollster.com forecast data and Xbox post-stratified data would have predicted that Obama would win, for the two-party Obama support rate was almost always higher than 50% in the graph. As we know, the latter prediction was correct, and that showed the success in dealing with non-representative polls so that it can make good prediction, which was the aim of that paper.

Reference

Wang, Wei, David Rothschild, Sharad Goel, and Andrew Gelman, "Forecasting Elections with Non-Representative Polls", *International Journal of Forecasting*, 2015, 31 (3), 980-991.