Part 1

(a) I actually got no valid response.
(b) I called 200 numbers and got no response.
(c) 3 people picked up the phone but no one actually allowed me to ask the question (two didn't say anything before they hanged up and one said "no").
(d) The first time I called was at 10 am, which was 8 am in Washington. The next time was 4 pm, which was 2 pm in Washington. I don't know how much the role of the time matters in my response rate because I got no valid response at both times anyways. (Although theoretically, I could probably get more responses in the second call as people might be less busy in the afternoon.)
(e) Not applicable.
(f) Not applicable.

Part 2

In the forecasting paper, Wang, Rothschild, Goel and Gelman (2015) introduced a statistical technique: "multilevel regression and post-stratification (MRP)" to adjust non-representative dataset to make accurate predictions. In my response paper, I will first describe some characteristics of the non-representative Xbox raw data the authors used and then the data sources the authors used in poststratification. Lastly, the prediction of 2012 U.S. presidential election outcome using the Xbox raw data, Pollster.com forecast data and Xbox poststratification data will be compared.

As the Xbox sample is far from being representative of the pooling population, there are many variables exhibiting considerable differences from the representative pooling. Among the eight variables reported in the Xbox data, race, state and 2008 vote exhibit least difference from the representative pooling, while sex, age and education exhibit the most differences. From the data of these three least representative variables, we can observe a huge difference between the data in the Xbox sample and those in the representative samples: while 18- to 29-year-olds comprise the majority of the respondents in the Xbox dataset, this age group represents less than 25% of the exit poll population; according to the Wang et al. (2015), men make up 93% of the Xbox sample but only 47% of the electorate; college graduates make up to nearly 50% of the exit pool population but only about 30% of Xbox population. With regarding to the reason behind these discrepancies, firstly, as Xbox Live is a gaming platform first launched in 2002, there would be more young people using it than old people. As to the gender, many researches have proved that male tend to play more video games than female (Lucas & Sherry, 2004; Williams, Martins, Consalvo, & Ivory, 2009). When it comes to education, there is no explicit evidence that people with higher education background play less game, but the appearance of less college graduates and more some college in the Xbox data might be related to the age distribution of the data. As the majority of the Xbox players are18- to 29-year-old youngsters, there might be a proportion of them right in the college when taking the survey.

To use the non-representative Xbox data to make presidential election forecasts, the authors conducted statistical adjustments via "multilevel regression and post-stratification (MRP)" to construct daily estimates of voter intent (Wang et al., 2015). The authors used both the Xbox data and the 2008 Exit Poll data to perform the post-stratification reweighting of the respondents. In particular, the author used 2008 Exit Poll data to compute cell weights as this was the dataset that could have been used when predicting the 2012 Presidential Election (Wang et al., 2015).

When comparing the prediction accuracy among the Xbox raw data, Pollster.com forecast data and Xbox post-stratified data, we can look for information from the figures in the paper. From Figure 2, we can see that Xbox raw data would predict Romney win in the last three weeks while the prediction of Pollster.com is uncertain as the Obama support rate keeps fluctuating around 50% during the last three weeks. Figure 3 provides a comparison between the MRP adjusted Xbox data and the Pollster.com estimations, from which we can see that while the Pollster.com prediction is uncertain, the adjusted Xbox data predicts Obama win during the last three weeks, which is an accurate prediction.

References

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Williams, D., Martins, N., Consalvo, M., & Ivory, J. D. (2009). The virtual census: representations of gender, race and age in video games. New Media & Society, 11(5), 815–834. https://doi.org/10.1177/1461444809105354