# POLL-ITICS

This article provides a review of the political polling process including a historical overview, current trends and challenges for the future.

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# History of Polling

The first political poll, called a straw poll, was introduced during the election of 1824 in Pennsylvania. This poll predicted that Andrew Jackson would win over John Quincy Adams, and Jackson did win the popular vote but lost the Electoral College (which was not the object of the survey). Over the next century, the process of data collection evolved into direct mail solicitations - through the magazine of the day, Literary Digest, which contacted millions of potential voters as its sample and successfully offered predictions on the presidential election from 1916 through 1932. In 1936, Literary Digest opted to base their sample on motor vehicle registrations and phone numbers, which biased their sample, and led to the prediction that the more affluent candidate, Alf Landon, would be the next president. Of course, FDR was re-elected for the second time, and due to its errors, Literary Digest lost credibility and soon went out of business.

Instead of collecting data from millions of people, as had been the practice by Literary Digest, George Gallup and Elmo Roper used representative sampling methods of fewer people to predict the outcome of the 1936, 1940 and 1944 election. Gallup and Roper began using the modern scientific approach to polling by implementing a probability sampling technique and a margin of error. In 1948, Gallup along with other pollsters predicted Thomas Dewey would win the presidency. Yet, Truman won re-election and the polling error is reflected in the now famous photograph of Harry Truman holding the Chicago Tribune newspaper with the headline "Dewey Defeats Truman". This catastrophic effort was explained by embarrassed pollsters as "late deciders" breaking for the President.

Since the 1950's polling has become an important part of the political campaign process for a variety of reasons including the media's penchant for horse race oriented campaign stories to entice and keep market share, as well as the campaign's attempt to formulate messages that reflected a candidate's strategy in winning the election or success in a public policy initiative. Polling has proliferated in recent times. In 1972, there was one national presidential poll during the last three weeks of the election; in 2008, there were twenty-four (fivethirtyeight.blogs.nytimes.com/2012/09/29).

# Why use polling?

Polling is utilized in politics to gauge the public's attitude toward a person or issue and to learn what message could persuade a particular type of voter to support a particular person or issue. Polls can measure candidate viability through the ballot test question, and evaluate the effectiveness of a particular communication strategy. For instance, polling allows a representative sample of 1,000 people

to share their opinions on a candidate or issue, thereby providing the researcher the ability to extrapolate such findings to the overall population.

Polling provides data on key segments of constituents of the population's attitudes toward a particular issue in contrast to the overall population. Standpoint theory affirms that it is problematic to truly understand someone else's perspective of the world because each of us is shaped by multiple factors and individual's experiences. Polling provides a vehicle to understand trends, similarities and difference of subgroups within the general population.

## Data Collection

There have been many changes in collection methods of data over the last one hundred years. For instance, the straw poll, which was popular in the 19th century, now is viewed more as a fundraising gimmick, rather than a legitimate and accurate measurement of public opinion. For example the Ames Iowa straw poll has been used by the Republican Party since 1980, but has accurately predicted the eventual nominee only twice (1996 and 2000).

Direct mail and face to face interviews for data collection were the most popular techniques used in the early 20th century. Direct mail continued to be popular into the late 1980. Yet, the increase cost of postage and the decrease in responses adversely impacted the reliability of this data collection method. The face-to -face interview also became too costly, and was hampered by potential interviewer bias. In response, the modern polling industry adopted the telephone as its favored means of data collection.

Live operator phone calls continue to be the standard practice because they allow access to most of the population and, in addition, there is also no limit on what sample of the population you can access via cell phones. Eleven of the twenty two national polling firms use this telephone method (fivethirtyeight.blogs.nytimes.com/2012/11/10).

For the last decade, telephone data collection has evolved with Voice Over Internet Protocol (VOIP) and Interactive Voice Recognition (IVR) software, known as auto calls or robo-calls. This system of data collection allows for a pre-recorded message to be played to all recipients. Recipients respond with keypads to enter their choices.

According to Nate Silver, the most accurate pollster in 2008 and 2010 was Scott Rasmussen and in 2012 Public Policy Polling, both use IVR data Collection.

One explanation for the accuracy of IVR data collection is the trend for increased automation in people's day to day lives, including touch systems for customer service, self-banking and even self-checkout at stores. However, there are challenges as IVR may lose its legitimacy in data collection, given that the FCC has made it illegal to call cell phones which limit the sampling frame.

Internet data collection is growing in popularity with the ability to ask longer questioners and having a representative sample. Firms like Ipsos/Reuters and Google Consumer Surveys were remarkable success in 2012.

## Aggregate Polling

Known as "the poll of polls," aggregate polling has been around since 2000.  The distinguishing characteristic of aggregate polling is that statisticians do not actually conduct any polls themselves but rather collect polls and use a weighting system to predict the outcomes of races.  Critics argue that aggregate polling compares apples with oranges, as each poll has different margin of errors and different data collection processes.  Nonetheless, proponents argue that the reliability of results as accurate predictors proves the validity of the method. Real Clear Politics was the first to introduce this method to the mainstream, and aggregate polling is now very popular in the media, as is evident with the Huffington Post and The New York Times fivethirtyeight.com's Nate Silver.

## Web Analytics

Today's pollsters are opting for non-evasive ways of measuring attitudes as a means of countering the Hawthorne effect, which suggests that the act of observation will affect behavior. Web analytics examines the dynamics of individuals on the web.  As people surf the web, data is constantly being collected about which pages a person visits, how long s/he stays on a page, how many comments are generated by a story or quote.  Some analytics include the number of "likes" or "friends" on Facebook, the number of followers on Twitter or the number of views on youtube,.  One critical concern is that social network sites can be artificial or have purposefully inflated counts do to advertising.

## Types of Polling

Cross sectional polls are the most common type of polling used in political campaigns.  These are snap shots in time polls, where a poll is conducted in a few days or less. Such polls also are called benchmark polls and brushfire polls.  These types of polls are limited in value because there is only one result to analyze as opposed to longitudinal studies.

The uses of tracking polls are popular in determining the effects of how messages are being received by voters.  Tracking polls are conducted through a series of shorter polls over the course of days, weeks or even years.

Overnight and flash polls are typically used to learn the effects of a particular event, such as a debate, or if an advertisement or direct mail piece is having the intended effects.  These polls are done in one night and have a few questions that directly examine a communication phenomenon.

Bellwether polls use a sampling technique that identifies a region or city/town of a state that closely reflects the voting trends of the entire state. This region is polled and the results are generalized to the overall population.

Push polling is a message strategy technique that is designed to resemble a scientific poll.  The purpose of push polling is not to measure the attitudes or feelings of a potential voter, but rather to persuade a voter through the use of leading questions.

Exit polls are conducted the day of an election; in which voters are ask to tell interviewers who they voted for and to learn about their demographics. America's Constitution calls for a secret ballot, and in order to learn the demographics of voter support for a particular candidates or issues on Election Day, pollsters will visit various voting locations to interview voters after they have cast their vote.

## Polling Effects

There are multiple theories on the effects of polls on society, but the extent and magnitude of such effects is up for debate. Some advocate that a poll early in the campaign, which shows a candidate winning, will create a bandwagon effect as people want to be associated with a winner, and will support a candidate early in the process, thereby limiting the ability for a challenger to persuade voters.

In contrast to bandwagon phenomenon is the underdog effect, based on the notion that people root for the underdog as witnessed by the David versus Goliath narrative. When a poll shows a candidate losing, this theory postulates that people will rally around the candidate and support them in opposition to the presumptive winner.

Immediacy theory argues that people are intensely interested in the results of elections, and that instead of waiting for Election Day to count the votes, there is a need to know who is winning at any given point. As a result, the popularity of polling has increased. This horse race phenomenon provides pundits something to talk about during the campaign dependent upon the polling results. Within this context of polling, it is incumbent to remember LaPiere studies of the 1930's that found that attitudes do not necessarily reflect behavior, and that several indicators such as favorable opinion may not result in an actual vote.

## Question Design

Two key terms regarding polling are validity and reliability. Validity asks are we studying what we claim to be studying and reliability looks at the consistency of the results. Such factors including the time of day a survey is administered, the day of the week, weather factors, among others can influence the results and lower the reliability of the data.

Basic survey format includes a screening question, name recognition questions, followed by ballot tests, then issue and message strategy questions and finally demographic questions.

Screening questions are used to qualify a person to participate in the survey. Most polls for electoral politics will ask if the person is registered or likely to vote in order to qualify for the survey. Yet there is a caveat which will be discussed subsequently in the "likely voter model".

Name recognition is a product of favorability questions, where respondents are asked if they have a positive opinion, negative opinion, no opinion or never heard of the candidate in question.

Ballot Test questions are asked after the name recognition questions, so as to not influence the former. These questions focus on who voters are going to vote for.  Most pollsters write and order the responses based on what the voter will see on the ballot on Election Day.

Issue and Message Strategy questions focus on identifying what issues are most important to voters.

Demographic questions focus on age, party affiliation, gender, socio-economic status, education level, home ownership, marital status, race, ethnicity and children and so on.

Open ended questions allow interviewers to freely choose their answers, but can be difficult to analyze as they need to be categorized and coded. Most polls use forced choice question design.

Polling can be used as part of a media audit to determine where voters get their news, what programs they watch or what other sources they use throughout the day in order to target messages to these individuals.

Wording of questions can bias the validity of a poll. For example, using loaded words such as if a person "support the killing of babies" would likely result in an answer of "no but the question of whether someone "support abortion" could illicit a "yes" response

Other examples include double barreled questions in which two questions are asked at once.  Leading questions are characterized by an assertion that predisposes the recipient to a particular response.

## Sampling Methods

A sample is a subset of the population. Probability sampling refers to the opportunity for everyone in a population to have an equal opportunity to be chosen. Since political polling is protected as political speech the "do not call list" does not apply and all phone numbers can be dialed. The exception is that if you are using an automated data collection method, you are not allowed to call cell phones.

The two most common types of probability sampling employed by pollsters are Random Digit Dial (RDD) and using a random sample from a list of registered voters.

RDD is a probability sampling method that randomly generates telephone numbers by using area codes, followed by 3 digit local exchange code, and then a random assignment of the last four digits. An important caveat with this technique is if you generate your own RDD list, make sure that you eliminate any emergency numbers including police stations and hospitals.

Registered voter lists can be acquired from the Secretary of State's offices normally for free, or for a nominal cost, However, many private vendors provide this data to candidates and campaigns as well.

A typical random sample provided by a vendor costs $350 to $500 depending on size and any stratification requests.

## Data Analysis

Polls are analyzed through top line results (referred to as frequencies or marginal) which are the percentage of responses given for each answer to each question. Most pollsters only use cross tabulations as further analysis, and do not employ advanced statistical testing such as Chi Square, Anova's, t-test, correlation and regression analysis.

Before results are published, most pollsters will determine if the sample that answered the poll is representative of the entire population, based on a set of parameters such as age, gender and party affiliation. If the sample is not representative, then the pollster will use a system of weighing prior to analyzing the results.

Weighing is the process of assigning more value to one demographic and less value to another. For example, if a sample has 100 respondents, and 70 were women and 30 were males, but we know from voter registration numbers that gender is split 50/50, then we would devalue the results of women by dividing 70 by 1.4 and multiplying men 30 x 1.67 to create a representative sample of 50/50.

Using multiple demographics is more complex and there is no universal agreed upon weighing principle used by all pollsters.   Yet, the general rule is to either collect a large enough samples in order to eliminate enough respondents to match the parameters set by the demographics, or after each weighing of one demographic, making adjustment in other demographics.

Perhaps the most important criteria for weighing is party affiliation, and some firms use "a likely voter model" (LVM) which accounts for the variance in survey results for any given race.  Pollsters use a variety of techniques to determine the LVM of any given election including exit polling and party registration numbers.

Some pollsters do not weigh their results, claiming the randomness of the sample is what makes the results representative of the over all population.

## Margin of Error

Margin of error (moe) is a statistic used to determine how much sampling error is contained in the results of a survey.  It is usually expressed as a range within which the real population statistics will vary in any given sample. A moe is calculated based on the size of the sample and, to a certain degree, the size of the overall population.  Simply put the more people who answer the survey the lower the moe. Social Science research uses a 95% confidence level as part of the formula, which in laymen terms, refers to being accurate 19 out of 20 times.

## Challenges for the Future

Equifinality suggests there are multiple ways to reach a desired outcome, and this certainly applies to polling.  Methods of data collection and analysis have continued to evolve from the days of the first straw poll conducted during the 1824 presidential election, and the challenges presented by the Literary

Digest approach to public opinion.  For example, over the last decade, modifications in techniques have changed to ensure a representative sample with younger people opting for cell phones and abandoning land lines.  In order to reach sub-groups of the population multiple methods of data collection will become more prominent in the future, including the use of web analytics and the Internet. An example of how different forms of data collection can lead to bias responses is a study conducted by Pew Research Center (2010) which suggests that people who answer the polls on landlines are biased toward conservative values by about 5% versus those who answer via cell phones.  Those successful in gauging public opinion via polling will remain vigilant and cognizant of such changes within the public and its means and manner of decision making.  To do so, increases the likelihood that polling predictions mirror reality, which is the bottom line in the credibility of any pollster.

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