

Public Opinion Polls

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Abstract

The entry describes the methodological and theoretical foundations as well as some societal and political issues around public opinion polls. After a brief historical account of the elements that have led to modern public opinion research the entry addresses problems of validity and accuracy, particularly in the context of election polls. The author then describes citizens' relationship to the polls in terms of their cooperativeness and in terms of possible effects of published opinion polls on the electorate. The use of polls by politicians and governments is regarded under the notion of 'responsiveness'. The entry concludes with a critical outlook on the future of opinion polls in democracies.

Main text

The term 'public opinion poll' describes a social research method used to measure the opinion of the citizens via interviews with representative samples of the whole population. The terms "opinion poll", "survey" or "survey research" are often used as synonyms because some authors want to avoid the term → "public opinion" because of its ambiguous connotation in the social sciences and political philosophy (see below).

Most scholars would agree that a public opinion poll is defined by three criteria, each of which follows from the three terms. First, the term "public" indicates that survey questions relate in their majority to public issues (→ public affairs), i.e. topics that are of relevance to the wider community and discussed in the → public sphere, particularly in the news media. With this definition, surveys for marketing or other purposes would not fall into the category of public opinion polls. Second, the term "opinion" indicates that opinions and attitudes as well as the behaviors following from these are the core of such surveys. Third, the term "poll" indicates that public opinion polls are usually conducted in a standardized form and with large samples of several hundreds or even thousands of respondents.

"Standardized" means that each respondent is exposed to identical questions (stimuli) in order to make the responses comparable. This procedure is a requirement for measurement in the sense that the same yardstick is applied to each unit of analysis. Standardization usually also extends to the

responses through so-called closed-ended questions in which respondents select from response alternatives. The number of people interviewed and the procedure of their selection decide about whether the results of the survey are representative for the population at hand. As a general rule, the bigger the sample the closer the results to the result one would have obtained had one interviewed each and every member of the population. However, this rule only applies if the selection process for the respondents follows the rules of proper sampling.

Emergence

What is a common institution of today's democracies has needed a long and often controversial process to develop. Four elements had to come together for the development of modern public opinion research as we know it today: counting human beings, thinking in variables, using humans' answers to questions as a source of scientific evidence, and the principle of sampling. *Censuses* were used already in antiquity to find out about population size (and potential tax payers). But they were exceptions and even the bible expected God's punishment for it. Ideological obstacles for thinking of human beings in terms of *variables* were more a phenomenon of the 19th century, when the humanities turned empirical and adopted the epistemology of the natural sciences. Particularly the churches rejected the notion of 'laws' in human attitudes and behaviors as pursued by some scholars in Europe (political arithmetic; moral statistics). Of course, it was a naïve misunderstanding to equal empirical laws (in the sense of regularities in behaviors) with normative laws (in the sense of prescriptions) but the resentment against statistically based hypotheses on human behavior was nevertheless influential and hindered the spread of the modern social sciences. Such laws were often seen as a blasphemy to the individuality of man and the idiosyncrasy of his acts.

Using human's perceptions as a *source of evidence* for reality was less debated but rarely practiced before the 19th century. Again, it was the social problems following from industrialization that motivated researchers to apply questionnaires for a systematic and comparable collection of data on the living conditions of workers, particularly in England. Finally, a way had to be found how to arrive at reliable data without interviewing the whole population under investigation. The British statistician Arthur Bowley supplied it in 1906 with his theory of *random samples*. It took six years until the method was applied in a representative survey of the British population. Thus, what we know today as public opinion research was born in the early 20th century.

In the course of this century and despite the humanitarian problems caused by World War I the focus of opinion surveys shifted from socio-political to more public or general political issues on the one, and marketing and advertising purposes on the other side. It also shifted from Europe to the US - for several reasons. First, the brain drain of mostly Jewish social scientists had led to a high potential of well-trained and ambitious researchers in the New World. Paul Lazarsfeld who started the Office of Radio Research (later called the Bureau of Applied Social Research) at Columbia University is seen by many as one of the founding fathers of modern social and communication research. Second, the US had a long tradition of a functioning and lively → democracy where people's opinions counted. Third, capitalism was booming and the marketing of commodities a backbone of society. Finally, the mass media were far more developed than in any other country, offering spaces for public discussions and becoming more and more a target of public discussion themselves.

Psychologist George Gallup had the biggest influence on the coining of what we see today as public opinion polls. In 1933 he conducted the first poll on the US presidential elections and

institutionalized two years later his “American Institute of Public Opinion (AIPO)” with the goal “impartially to measure and report public opinion on political and social issues of the day without regard to the rightness and wisdom of the views expressed.” In 1940 he published “The Pulse of Democracy”, co-authored with Saul Rae (Gallup & Rae 1940). In the same year already 118 newspapers in the US had a contract with Gallup Poll and Gallup himself appeared regularly on CBS with his broadcast “America speaks”. These titles indicate the claims that came with modern public opinion polling: that it can measure the true will of the people and that, through the polls, the people get a real voice in between elections and on all kinds of issues.

One incident in 1936 helped to bring the breakthrough: Gallup had correctly predicted the winner of the presidential elections on the basis of only 3000 respondents while a large-scale straw poll with 2.3 million respondents conducted by the magazine “Literary Digest” got it wrong. The forties saw not only the spread of the methodology but also an institutionalization and professionalization of public opinion research. In 1941 the first university institute (National Opinion Research Center at the University of Chicago), and in 1946 the first professional/academic association (American Association for Public Opinion Research, one year later the World Association for Public Opinion Research) were founded. In 1948 the first academic journal (Public Opinion Quarterly) was published. Europe, still suffering from the World War, followed with some delay along these paths of professionalization.

Validity of Public Opinion Polls

Despite their widespread application in all democratic countries public opinion polls are still a highly debated issue. The discussions center around basically four questions: Do they measure true public opinion? How accurate are they? Do they influence the electorate? And do they influence policy-makers?

Debates on the validity of public opinion polls go much beyond the notion of the term as used by social scientists. They are not only about whether polls measure what they pretend to measure, which is the ‘empirical’ notion of validity, but whether they are measuring the right object in the first place. This is, as can be expected and was mentioned above, related to the different notions of the construct “public opinion”. The term is highly ambiguous. Schoenbach and Becker (1995) distinguish five different dimensions in the many definitions: (1) Any opinion held by a majority of citizens (quantitative definition); (2) the opinion of elites - with intellectual capacity or powers to influence society (normative-elitist definition); (3) any opinion concerning public affairs (definition by object of opinion); (4) an opinion reached through a public process of learning and consensus (deliberative public opinion); and (5) any opinion allowed to be expressed in public without fear of social isolation (socio-psychological definition of public opinion).

One of the core points of discussion is whether public opinion involves or should *involve every citizen* independent of his or her political knowledge or degree of participation. In a representative opinion poll every citizen has the same chance to become part of the sample, be interviewed and voice his or her opinion on all kinds of issues. As in democracy in general: the votes are counted, not weighted (by the ‘importance’, power or class of the person who casts them). This ‘egalitarian’ attribute of large-scale opinion polls was early on questioned by some theorists. For German sociologist Jürgen Habermas in a democracy “public opinion” is reserved to citizens who have the knowledge to make up their minds about issues, are ready to talk about them in public situations, and accept the

responsibility for the consequences of what they say – criteria that certainly do not apply to every member of a representative sample of the population .

As second aspect of validity relates to the surveys' ability to measure what people 'really' think. This goes beyond accuracy and extends to the question what 'true opinions and attitudes' are and whether respondents have such discrete opinions and attitudes in the first place. Discussions and research on this question are a rather new development. In the traditional 'file drawer model' researchers assumed that people have such discrete cognitions on almost every issue discussed in the public sphere and that opinion polls just had to solicit them through appropriate questions. This rather naïve view was challenged by two observations: first, results showing a high instability of survey results over time even on the individual level, and second, studies showing that responses in interviews vary according to several factors on the side of the stimulus as well as the respondent. These observations have put the *cognitive aspects of survey methodology* on the spot, i.e. understanding the psychological processes between stimulus and response from question comprehension, retrieval and judgment to response (Tourangeau, Rips & Rasinski, 2000).

The core assumption of this new paradigm has been the hypothesis that respondents in public opinion polls create responses rather than deliver pre-existing ones. Scholars transferred evidence about information processing gathered in cognitive psychology to the situation in public opinion interviews. One example is the elaboration-likelihood-model (ELM) which assumes two distinct ways in which people deal with incoming information: In the central way, applied when high involvement prevails, they weigh their existing attitudes against a new argument and then form an opinion about it. In the peripheral way, when low involvement is given, they consider the new argument through external cues like the attractiveness of the communicator or way the argument is presented (→Persuasion, Political). Applied to survey research psychologists suggested that respondents might also use such differential cognitive paths when being confronted with survey questions.

This has brought about a new look at, for instance, so-called context effects in surveys where respondents' attitudes on a subject differ according to the topic of the questions asked before. The psychological approach to survey research suggests that previous topics can affect the accessibility of cognitions on the subsequent topic and thus the responses. Research often conducted by means of split-ballot-experiments (where one half of the sample receives the stimulus in one, and the other half in the alternative form) indeed have proven the effects of question wording, the position of items in the questionnaire, or the use of particular scales (e.g. 10 point scales from -5 to +5 versus 1 to 10). These studies have indicated that respondents create their answers while processing the survey stimulus and using accessible cues helping them to find heuristics for their own opinion.

In the case of opinion polls on political issues and elections such psychological influences on survey responses create a huge challenge. They question the methodology's ability to accurately reflect what the public really thinks and, as a consequence, they might lead to questions about the general legitimacy of opinion polls. However, the best way to cope with such allegations is what has been the reason for the challenges in the first place, i.e. methodological research. More than half a century of experiments and other forms of investigations have brought about an enormous body of knowledge which, if applied by academically trained professionals, makes public opinion polls a reasonably valid source of what the people think.

Accuracy of Public Opinion Polls

The accuracy of opinion polls is of a more trivial kind but makes it more often into the media and public debate. Accuracy is more trivial because it is not about the general ability to reflect the public's opinion that is questioned, but its accurate measurement. Critics thus start from the more traditional view that people do have indeed discrete and concrete opinions and attitudes but that the polls often just are unable to measure them. In most cases such debates evolve around election predictions. Elections are a hard reality test for public opinion polls which makes its potential visible (as in the case of the US 1936 elections) but can also brutally show its failures. Only twelve years after Gallup's breakthrough in the contest with the "Literary Digest" the Chicago Daily Tribune published its most embarrassing headline ever when it wrongly announced in its early edition "Dewey Defeats Truman", a claim made on the basis of opinion polls before the election combined with biased evidence of one of their Washington reporters.

Nevertheless, predictions made on the basis of public opinion polls were astonishingly correct – at least most of time. Between 1956 and 2004 the US presidential elections showed an average deviance of only 1.9 percent (based on Mosteller method 3, one of several statistical ways how to calculate the margin of error, see Traugott 2005). But there have been major disasters for the pollsters in many countries, e.g. the US presidential elections of 1980, the British parliamentary election of 1992, or the German parliamentary election of 2005. The reason for these flaws is two-fold: First, polls are quite good at measuring opinions and behaviors at the time the poll is taken but often miss last-minute changes in the electorate. Second, it is a methodological challenge for pollsters to make inferences to attitudes and behaviors of those who have declined to participate in a poll or to answer the decisive question on their voting intention. Both problems--the volatility of attitudes and behaviors and the shrinking willingness of people to participate in surveys (see below)—are have become more and more salient.

When election researchers conducted public opinion surveys in the forties to sixties of the last century a majority of the citizens had a rather stable loyalty for the same party throughout consecutive elections. Preferences for parties and their respective candidates were mainly formed by social class, upbringing, religion or even geographical region. This is how the concepts of the "predispositions" and "normal vote" were created: a behavior explained by a few variables that, if known to the researcher, allowed predictions on the voting decision on the individual as well as on the aggregate level pretty accurately. Social mobility and differentiation, exposure to different, often conflicting influences throughout socialization, as well as a declining political interest has made voting behavior much more volatile over time. One indicator is the ever later point in time when people decide whom to vote for. If more and more people are undecided until shortly before Election Day unpredictable events can have a decisive impact on the election outcome. Natural disasters and their competent or incompetent handling by the incumbent, attempts of scandalization of a candidate by the opposite party, or the performance of a candidate in a televised debate (and its subsequent wide coverage in the media) are examples of such effects that are hard to grasp by the opinion polls. Before this background the stable if not increasing accuracy of election predictions can be seen as a success of opinion polls.

Going beyond assessments of the accuracy of opinion polls in election predictions, there exist several models for the different factors influencing survey error. Weisberg (2008, 225) distinguishes between respondent selection issues, response accuracy issues, and survey administration issues. Errors in the

respondent selection phase are the (unavoidable) sampling error, the coverage error (selection procedures excluding certain parts of the population, e.g. people without internet access), and non-response error at the unit level (no contact with target person or refusal). *Response accuracy issues* include nonresponse at the item level (specific questions unanswered), measurement error due to the respondent (e.g. inaccurate responses due to cognitive demands or impression management), and measurement error due to the interviewer (e.g. deviation from standardized stimulus, cheating, or undue influences). Finally, *survey administration errors* comprise postsurvey error (everything happening in data cleaning and analysis), mode effects (effects due to the chosen survey method – face-to-face, telephone, self-administered, internet), and “house effects” (special ways of intended or unintended biases in the methodological procedures of survey institutes; on survey error see also Groves & Lyberg 2010).

Thus, there are already many Achilles heels for public opinion polls. Modern communication technologies have added new ones that can affect the accuracy of opinion polls. In the field of respondent selection mobile phones have created challenges in that samples can no longer as easily be drawn through random digit dialing as was the case with landlines. Plus, in some countries and/or with some mobile phone contracts answering a call on the mobile phone can generate fees on the side of the respondent. Further, while online surveys via the internet offer unprecedented forms of presenting the stimulus and storing the responses, composing representative samples of the entire population is still a challenge - even in countries with a high internet penetration (Yeager et al. 2011). The consequence is that existing online polls in most cases either lack representativeness or are based on access panels, i.e. an already existing group of people who have given their prior consent to be interviewed – which raises again questions about representativeness.

Public Opinion Polls and the Public

People’s relationship to opinion polls has cognitive, affective, and conative dimensions – or transferred into questions: What do the people know about opinion polls? What do they think about them? How do they act when confronted with them? What the average citizen knows about the methodological grounds of poll data has received little to none research. There is some evidence on what the public thinks about them. In western countries most people believe that polls are a good thing for democracy. In the US a clear majority even holds that poll data should influence political decisions (Hildreth, 2008, 444).

However, when it comes to one of the conative dimensions, i.e. whether people grant an interview to the pollsters (the *response rate*) the data show another picture. Over the last decades the proportion of the originally drawn sample that ends in completed interviews has become smaller and smaller. There are two components of this phenomenon that can have unwanted effects on data quality. First, people’s increasing mobility today leads more often to what the pollsters call ‘no-contact’. The interviewer has a valid household number (or a front door or even an existing email address) but either nobody responds or the target person in this household is not available. One of the reasons for the increase in no-contact-situations is mobility which itself is caused by many social and economic factors such as job-related mobility, more outdoor events, and patchwork families.

A second element of the declining response rate is an increase in the number of respondents who, once successfully contacted, refuse to grant an interview (refusals). There is evidence that the overall

decline in the response rate has lately been more driven by refusals than by no-contact. Thus, while people believe in the democratic value of opinion polls they do not always want to cooperate when asked for an interview themselves. The reasons for this development can be found in 'overfishing' and 'copycatting': The increasing number of polling institutes and polls conducted also has dramatically increased the chance that a citizen will be contacted many times throughout the year (overfishing). And, in each country call centers contact people by claiming that they are "conducting an opinion poll" while in reality they are trying to sell something (copycatting). As a consequence many citizens do not differentiate between research-oriented public opinion polls and marketing campaigns.

The relationship of the public to public opinion polls has still another conative dimension and one that is as much an issue of public debate as the accuracy of election predictions, i.e. their possible *effects on voting behavior*. Starting in the seventies researchers and political practitioners added to the list of hypotheses about the possible effects of published polls on the electorate. The most popular of these hypotheses is the → "bandwagon-effect", the assumption that undecided voters might tend to vote for the party or candidate who is expected to win the election (making the voter being among the winners – and on the wagon where 'the music plays'). However, there has also been the hypothesis of an → "underdog effect" claiming just the opposite, i.e. that some people might vote for the potential losing party or candidate. Other assumed effects refer to the voter turnout, either at the expense of the potential winner ("lethargy effect") or the potential loser ("defeatism effect").

Numerous studies have been conducted to test whether such assumptions hold true. As one can already expect from their contradicting nature the empirical evidence on the effects of published opinion polls on the electorate is less than conclusive. Most studies have shown either no effect at all or very small effects - with the rule of thumb that the more natural the research setting, the less likely effects of election predictions. Only some laboratory experiments were able to track down causalities. On the basis of a meta-analysis of studies Hardmeier (2008, 510f.) came to the conclusion that "the fears of many politicians and some researchers about the impact of published opinion polls are exaggerated. Often these assumptions not only reflect an outdated idea of media impact but also overestimate the scope and intensity of the effect". Hardmeier suggest that in those cases where (small) bandwagon effects have occurred it could be explained by gratifications theory (being among the winners), cue-taking (i.e. using secondary, 'peripheral' signs for decision-making in an undetermined situation), and a strategic behavior aiming at maximizing the weight of one's own vote (→ Voting Behavior and Communication).

The empirical evidence on possible effects of published public opinion polls is one, the evaluation of such effects before the background of democratic theory and constitutional law another aspect. For many legal experts and, of course, for the public opinion researchers around the world, such a ban violates constitutional rights not only of the citizens (freedom of information) but also of scholars (freedom of research), and particularly → press freedom (Donsbach, 2001). Nevertheless, many countries around the world, including democratic countries, have such bans. A recent survey conducted by the World Association for Public Opinion Research (WAPOR) in 85 different countries or regions found that 38 (46 percent) of these had blackout periods during which pre-election poll results could not be published. Among those a large majority enforces those restrictions through government agencies or election administration offices, followed by independent agencies, and broadcast/press regulatory agencies (Chung 2012).

In 2001 the Supreme Court of the Philippines added another interesting aspect to the debate when it ruled on a bill about banning poll data before elections that had already passed parliament. In its decision the Court held: "To sustain the ban on survey results would sanction the censorship of all speaking by candidates in an election on the ground that the usual bombast and hyperbolic claims made during the campaign can confuse the voters and thus debase the electoral process...The assailed law, in effect, shows a bias by preferring personal opinion to statistical results" (quoted from the Manila Standard, May 6, 2001, p. 1f). Following this rationale, banning the publication of opinion polls before elections would even be deemed illegitimate if a bandwagon (or other) effects could be empirically proven. Poll data are just one of many signals that people are exposed to during a campaign and that some voters use as cues for making up their mind whom to vote for. The socio-psychological motivation to observe the environment for information about what other people think is a known phenomenon and basis for one influential theory of public opinion, i.e. Noelle-Neumann's → spiral-of-silence theory (Noelle-Neumann, 1984; see also Donsbach, Salmon & Tsfaty, 2013). It is likely that particularly undecided and politically less informed voters use poll data as a proxy for what others think and thus for their own voting decision. But poll data on the possible election outcome can also be a useful and legitimate information for politically interested and knowledgeable voters. In multi-party systems such voters can take these data as a basis for 'tactical voting', i.e. trying either to facilitate or prevent certain coalitions. After all and from a liberal point of view it must be left to the voters which information to consider when making their final voting decisions (Donsbach 2001).

Public Opinion Polls and the Political System

In democratic systems elections empower political figures to lead the country for a given time. The degree of satisfaction at the end of the term usually decides about their re-election (if such a re-election is possible). Leadership does not necessarily mean following the majority opinion. On the contrary, strong leaders are expected to rule against public opinion if they are convinced of the long-term advantage of their policy for the society as a whole. Thus, the correspondence between actions of the government with the preferences of all its citizens is expected to happen on the long run and in principle rather than at any given moment and on each and every political issue. Political leaders who monitor public opinion in order to align their decisions with the majority and, thus, want to enhance their chances for re-election are criticized as 'populists' (→ Populism). Some scholars have argued that the proliferation and day-by-day availability of public opinion polls has made politicians more populist (→ Issue Management). The money spent by governments and parties on opinion polls is seen as an indicator of such a development. Such causal relationships are methodologically hard to assess. Using the more neutral construct of political 'responsiveness', a few scholars have related political decisions to the development of public opinion on the same issues. Page and Shapiro have conducted the first longitudinal study of this kind comparing changes of public opinion between 1935 and 1979 with subsequent political decisions on the city, state, and federal level in the U.S. While they found a medium overall degree of responsiveness (43 percent of the decisions were congruent with prior changes in public opinion while 22 percent were incongruent) the responsiveness had indeed increased since the 1960s – coinciding with the proliferation of opinion polls. However, despite the complex nature of this study a causal relationship could not be assessed. This also applies to a similar study in Germany which did not find any change in responsiveness (Brettschneider 1996).

Thus, there is no clear evidence on the question if public opinion polls have made politics more 'populist'. And even if this evidence would exist it would be hard to use it as an argument against public access to poll data. If politicians increasingly follow trends of public opinion – and thereby use public opinion polls as an indicator for the public will – it can have many reasons including a change to more populist leadership styles in modern democracies. But this would be more a problem of political culture rather than of public opinion research.

Future research

In the near future public opinion research will increasingly face two problems: First, the decline in the cooperativeness of randomly chosen citizens when asked for an interview. Second, the question how the methodological potential of public opinion polls can be used for a more sophisticated and less superficial measurement of public opinion. The solution to the first problem is probably an increasing use of so-called access panels where, instead of contacting fresh samples, the respondents have given their prior consent to be re-interviewed – usually on the basis of some monetary incentives. While this 'farming of respondents' was seen for a long time as a methodological problem for representativeness it seems today inevitable. In many countries the most expensive and economically most consequential surveys, i.e. the television ratings, are based on such panels. Regular parallel checks with fresh samples, just as in the first panel study by Lazarsfeld, Berelson, and Gaudet (1944), can serve as a test if panel effects occur and provide parameters for weighing.

The second problem is a more fundamental one because it relates to the theoretical concept of public opinion. Many authors have criticized the use of public opinion research particularly by the news media. Journalists' → news values and their strive for urgency and speed would not necessarily lead to a use of polls for the public benefit but to a superficial horse race coverage where short-term majorities, often based on non-attitudes (see above), influence public policy. Such a use of public opinion research can have dysfunctional consequences for the political system through premature closures of public debates and a misinformation of the public and the policy-makers. Throughout the history of public opinion research scholars like Gallup, Yankelovich, or Noelle-Neumann have tried to motivate other researchers, their clients, and the press to rely on more sophisticated sets of questions on political issues rather than asking mere approval or disapproval. The "missing auxiliary questions" (Zetterberg)--like the degrees of knowledge and interpersonal conversation about the issue at hand--can help to assess the basis of opinions that people hold and thus to qualify the political impact of existing majorities. Thus, the products of public opinion research must be measured against the normative expectations in a democracy. If, as Hauser (2007, 334) writes, "the telos of public deliberation is the emergence of informed and reasoned public opinion" good public opinion research must be able to provide the indicators in how far the opinions it measures live up to this.

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