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# Opinion Polls as a Data Source in Political Science Studies: Can They Be Trusted or Not?

#### ABSTRACT

Polling of the general public opinions and behaviors in politics permanently entered mass media and also became a serious source of political commentaries and analysis. The author of this paper considers possible risks and possibilities due to exploiting results of public surveys done by research institutions and then used for scientific analysis and commenting current political processes. Research question which the author poses, pertains to credibility conditions of political surveys as the sources of data used for political analyses. This author puts forward a hypothesis that credibility of data gained from research providers depends essentially on many factors, such as methodology used, technical approach to research, realization, and familiarity with both as well as evaluative competence of scientists.

The author points out good and bad points of particular research procedures and shows basic criteria used as the basis on which a political scientist may be able to assess the quality of survey's data or compare results of various surveys. In a situation where voters' and politicians' communication reality is constantly changing and mass media influence the voting process, opinion polls become an important player on the political scene, and this is why they are evaluated on their credibility. It often happens that opinion pollsters are accused of deliberate lies. The following aspects were analyzed in this text: specifics of the method used in researching public opinions, surveys used in political science, detailed considerations pertaining to research character, research sample, realization indices, tools and techniques, and finally, conclusions concerning the credibility evaluation of survey's opinion.

Key words: opinion polls, political research, public opinion, quality of opinion polls

## INTRODUCTION

Principles governing scientific epistemology are, according to Jerzy Apanowicz, universal, and this is why they are employed in various specialties of human knowledge and activities. Moreover, these principles provide adequate, genuine and complete, in particular situations, cognitive results. Consequently, these principles should be adhered to in all disciplines and scientific specialties [Apanowicz 2002: 7]. Apanowicz points out the main principles that should be adhered to while using research procedures, these are:

- to use established research methods at all times, which ensure rational selection and meritorious correctness of activities and efforts to accumulate knowledge;
- to express thoughts and present examined elements (objects and processes) in a manner allowing for full, precise and unambiguous formulation of conclusions and generalizations, which ensures that their understanding can be popular and also can be used for multiple use and comparison with other researches;
- to maintain logical uniformity of the content merit with established facts of the researched matter, arranged in a logical system of axioms and theories during scientific presentations;
- to assume constantly questioning attitude toward newly formulated theses and hypotheses and constant verifications, control and development of existing scientific theorems;
- results of scientific studies must display a creative character and create possibilities to employ them in all areas of human activity.

The progress of knowledge, continually occurring in numerous areas of contemporary science, is increasingly based on vast empirical research. Too often it happens in social sciences that this enigmatic password "empirical research" hides designates having truly varied qualities and values. It often happens that such a notion describes limited research having only fragmentary application of surveying methodology, often used on small human samples selected accidentally by using questionnaires or simplified procedures (sample convenient<sup>1</sup>).

The author establishes upon observations that such "homemade" researches by social scientists who bypass established methodological and social science canons contain errors in all aspects, beginning with initial assumptions, then using selected methods, samples, accepted indices, tool construction and, finally, erroneous conclusions. The described phenomenon is a consequence of a commonly accepted stereotype concerning the so-called "hard" (based on quantity) data, and this notion is used to show results of all surveys (commonly known as questionnaires).

<sup>&</sup>lt;sup>1</sup> The selection of the sample is based on the fact that the units enter the study not randomly but accidentally, based on the principle that they were in the place at the right time when the research was carried out. The disadvantage of such selection is the fact that the possibility of getting into the research sample has only an undefined part of the statistical population, which significantly limits the possibility of generalizing later results on the entire population and their representativeness.

The goal of this paper is to analyze the problems connected with using the results of political opinion polls by institutions other than academic. The most important factors having an influence on the quality of polling results will be examined. Special attention will be devoted to research methodology and its influence on research process. Public opinion polls have been a specific social institution for decades, as a solid element of social order in democratic countries. Opinion polls are based, on the one hand, on scientific methodologies and achievements in evaluating representative samples, and on the other, on the need to know attitudes towards and views on questions important to the society.<sup>2</sup> Measuring public opinion by appropriate institutions was performed in the 1930s. This fact allows to employ institutional methodology in its current version in this analysis. This version concentrates on assumptions, functions, effects of actions and on mechanisms governing institutional activities.

### **OPINION POLLS – SPECIFICITY OF THE METHOD**

An opinion poll is a research survey conducted in order to acquire knowledge about public opinions, attitudes and the state of public consciousness. This method allows for effective measuring of the above-mentioned phenomena in large populations, because conducting complete research is impossible. It should be underlined that the character of this fact is ontological, which seems to be forgotten by numerous users of surveys because the survey is only a measurement of public opinion not opinion itself. Identifying results obtained by polling grass roots opinions is a serious error.

Howard Schuman, a well-known theoretician, methodologist and practitioner of polling research, used a very accurate Plato's allegory to describe this problem. Schuman compared polling workers (generally, researchers of this phenomena) to cave dwellers in Plato's writings, who are chained to walls. They are only able to see the shadows cast upon the cave walls (meaning here survey measurements). Based upon such "shadows", researchers have to formulate conclusions about the social reality. Unfortunately, the only reality that researches have at their disposal are "shadows", which is information obtained in such research which serves as the basis for their estimation of the surrounding world [Schuman 2013: 263].

Notwithstanding the above-mentioned difficulty, effectiveness of the survey method within the scope of reflecting features of a society has been scientifically proven, more, the methodology is constantly being evaluated and improved because of its common usage in politics. The reason for this is that this area of reality is vulnerable to survey errors, especially those showing the level of support for politicians and political parties. Scientific studies concerning public opinion research have been going on for many years. Attempts are made to find ways to improve

<sup>&</sup>lt;sup>2</sup> The author consciously omits here the propaganda aspect of opinion polls due to the fact that it refers to the function of shaping public opinion and not examining it.

research methods and to make research results complete. Moreover, other methods are used, e.g. individual or group interviews and applying logic or psychology in order to improve the inquiry process and receive true responses, therefore, to obtain better surveys results [cf. Markowski 2004]. Meta-methodological research and analysis aimed at improving the quality and precision of results are conducted around the world. Researchers analyze the influence of questionnaires' construction on the quality of obtained data [Saris, Gallhofer 2014], as well as significance of the way statistical sample is selected and communication path with respondents is established to obtain representative research [Callegaro et al. 2015]. This kind of research is an effect of social, political, civilizational, and technological changes. These changes reshape forms of contact with respondents, and reflect a new – but quickly entering into society - communication technology (e.g. Facebook, Twitter), and as such are an alternative source of knowledge about public opinions [Murphy et al. 2013; Tourangeau et al. 2013; Toepoel 2016]. Deliberations about the quality of polls become more intensified during elections, which is true in case of Poland and other countries, specifically if there are serious variations between prognoses and actual election results. The pointed reasons for missed prognoses, apart from the methodological issues, question the honesty of the polling agencies [Szreder 2016].

#### SURVEYS IN POLITICAL SCIENCE

Surveys are a significant source of current information, this is why political scientists are willing to use them. They can use surveys in order to examine social attitudes, reactions to current political events; compare preferences and declarations of voters with actual voting; pay attention to people's reactions to changes of significant elements of the political scene; foresee people's behavior towards phenomena, events or processes; monitor changes in political opinions on important political issues or politicians.

If, however, surveys derived from other sources are used for scientific analyses, and conducted without personal supervision, it is necessary to pay attention to a number of problems, which may influence their quality and credibility. Among the most important issues which should be taken into account are the following: the research character, the interviewer, the ordering entity, applied methodology (particularly the technique of data gathering and analyzing), the type and size of research sample (originally assumed and actually used). More general issues such as the context during research (time, social and political situation, mass media heralded events), cannot be disregarded.

The assessment of survey's quality may be difficult, but considering criteria mentioned above, it is possible to limit the risk of inadequate data. Scientific standards of indispensable information necessary to assess the quality of research have been established for many years and should be included in, for example: mass media releases about results. Antoni Sułek [2001: 273] points that the following elements are indispensable as far as press releases are concerned:

- the source of information, i.e. the name of agency which conducted the research;
- the size of statistical sample and the possible statistical terror;
- the method of the selection of respondents;
- the technique of data collection;
- information about researched populations;
- the exact wording of the main research question and the set of responses in a closed question;
- the time of conducting the survey, in case of research on political issues providing the exact date.

Information helpful in interpretation of results may additionally include:

- more specific information related to the sample (if the quota sample, characteristics according to which respondents were selected are necessary; if the random sample, the range of statistical error should be provided; if none of the above, the way of respondents selection must be exactly described);
- information about the degree of realization (percentage of respondents who participated in the research);
- the description of the basis used to establish this percentage (how many people responded, and percentage of refusals);
- percentage of meaningless responses (e.g. "hard to say, "I don't know", etc).

The lack of any of the above-mentioned elements deprives the analyst of the tools to formulate a solid analysis and to interpret the results of the conducted survey.

## RESEARCH CHARACTER

Any deliberations about the research character, and especially about the differences between surveys, which can be used as sources in scientific research and those, which are unsuitable for research, are hard to establish for no useful classifications are available. Schuman in his book Metoda i znaczenie w badaniach sondażowych (Method and Meaning in Polls and Surveys) [2013] refers to an old division of "survey research" into those conducted by universities or governmental agencies using representative random samples, and those quick and inexpensive research covering non-representative samples based on selected groups (or other) made by commercial entities [Schuman 2013]. It seems, however, that this division is no longer actual. In the Polish reality, this system causes an additional, terminological problem because "polling" is understood as repetitious research done using representative samples of a given community with the aim to establish the trend of changes. Polling is in contrast with panel research in which the same representative sample is asked the same questions at established time intervals. The reason is to establish changes of attitudes at the level of community and individual people. For this reasons, Schuman's division would cause terminological confusion. The only way to point which research should be used in political science analyses, without risking credibility,

is this guideline: use reliable research, done according to the art of surveying, using proper methodology (particularly testing sample) for the analyzed problem. If, however, the researcher is forced to use the surveys of dubious quality, for example, a non-representative sample or faulty methodology in all aspects, conclusions should be formulated very cautiously and show doubts concerning data sources. Deciding if any research is credible, or its methodology is faulty, requires the evaluation of several above-mentioned aspects. The most significant among them is the answer to the question of who was responsible for the realization of research.

It is worth mentioning that there are many opinion polling institutes in Poland among which fierce competition may be observed. Their statutory purpose is to provide data on the population's opinion regarding, for example, political issues (particularly voting preferences). Demand for political analyses occur during election periods and this is a great opportunity to improve the position of such an institute on the market. Some of these firms have been conducting political surveys for many years and are busy conducting societal surveys. They use proven methodology, employ professionals and have proper infrastructure (e.g. CBOS, Kantar, Millward Brown). There are other firms involved in constant marketing- and consumer-related surveys but conducting political polls is only one of many issues they deal with, and they do it once in a while (e.g. Estimator, Ipsos). When using research firms, a political scientist should have knowledge about such an institute and be cautious in situations raising doubts.

Even though a research firm may have an established position on the market, this does not guarantee a high quality of research. On the other hand, a small, less known firm may provide a better-quality service. Each time one should be aware of the credibility of the source, and take into account a number of factors such as procedures, standards and sometimes political connections of research agencies.

It is believed that comparison of firm's prior election forecasts with the actual results determines the assessment of its reliability. During the last decade, pre-election surveys, with few exceptions, do not deserve recommendation. After a scandalous survey during the presidential election in 2010, the market research firms community attempted to cleanse itself. The Polish Association of Public Opinion and Marketing Research Firms (Polish: OFBOR), an association of major survey firms in Poland, focuses on the quality and reliability of surveying and adherence to ethical and methodological norms, and promotes truly professional institutes. Procedures to certify firms in respect of the quality of work done by interviewers became common, and Quality Control Program of Survey Takers must be annually renewed and it constitutes a multi-stage audit of interviewers' work done for a certified firm. Names of certified firms, in particular their research techniques, are published on a web page<sup>3</sup>. While assessing the quality of scientifically analyzed data it is worth checking this aspect.

<sup>&</sup>lt;sup>3</sup> More information available at the OFBOR website: https://www.ofbor.pl/index.php/agenc-je/8-agencje?layout=blog (access: 07.01.2019).

No less significant, in the context of collected data reliability, is the knowledge of which entity commissioned the research to analyze voters' preferences or opinions. Opinion polls carried out by institutions implementing public statistics research, conducted on its own initiative or commissioned by public or scientific institutions, enjoy greater trust. Periodic preference surveys conducted according to one, if possible, outline of questions, are of particular importance. Then trends of changes can be observed and determined, which are significantly more informative than a singular measurement.

Results of surveys commissioned by political parties should be treated with caution. Parties may or may not attempt to realize their political goals by announcing beneficial attitudes or opinions (so-called *push polls*). Political parties or individual candidates often commission market research firms to create certain promotional actions, images; to monitor and plan the campaign, to make the division of voters, creating targets and positioning own candidature. There are known both regularities of the reaction of public opinion to survey results as well as their creative role, for example:

- bandwagon effect (or snowball effect) the pace of convictions' or attitudes' absorption increases proportionately to how commonly they were accepted by others, which consequently – in case of politics – demonstrates itself in voting for a leader or a group who are likely to succeed; or
- *underdog effect* voting for a person or a group having low support or a view shared by few [Noelle-Neumann 2004: 26].

The literature on this subject describes an array of other effects of surveys' implementation, which are interesting as the object of analyses, here deliberately omitted. A similar risk is related to using surveys commissioned by the mass media. Frequently, mass media aim at attracting the viewers' interest rather than gaining the most recent information and at times, media associated with a certain political option attempt to influence voters.

The above-mentioned risk does not necessarily cast a shadow on interviewers conducting a survey on behalf of political parties or mass media, because manipulation usually occurs at the stage of data interpretation and most often by presentation of results (omitting or overexposing other parts, presenting data only partially) in order to obtain the most beneficial picture for a politician or party.

## RESEARCH SAMPLE AND INDEX OF REALIZATION

Experience shows that the public opinion survey, ever since the political system transformation (since the 1990s), allows for a number of observations. Mass media provide scanty information about the methodology used by opinion polling firms, while reporting results of surveys. Using of surveys for conducting scientific analyses or rendering reliable comments for the public should not disregard particular methodology used in the research.

The information, which should be considered while using surveys for scientific analyses, concerns the researched population, type and size of statistical sample. Population is defined as a statistical aggregate, a community to which obtained results will be related. As indicated above, these are large communities, which cannot be examined directly and entirely. The most frequent object of interest for political science are adult registered voters, but also other groups, for example: young people, business communities, or members of certain religious groups. The essence of surveys is drawing conclusions about characteristics of a total population, based on a statistical sample drawn from such a group. There are numerous sampling techniques, too many to describe them in this paper, however, two of them should be considered – an unbiased (representative) and a biased (non-representative) samples.

As a rule, representative are samples drawn from a complete population<sup>4</sup> with each member presenting an identical probability to be randomly selected into a sample. Such samples are better than the other ones because they reflect more accurately the structure and characteristics of a population, as well as the level of statistical error can be defined.

Stratified random samples represent particular quota of a population. These are created by reflecting a known distribution of several demographic characteristics, which are assumed to have correlation with distribution of variables in the survey.

The main flaw of such a sample is a faulty assumption, taking into account the usual characteristics (such as age, sex, education or place of residence) which determined the sample, all other characteristics will have no significance in correlations, for example, in voting preferences. This is why this assumption is usually false. Stratified samples are used because they are cheaper and easier to handle than a random sample. The quality of a stratified sample can be improved through dividing the applied procedure into two stages. The first one will cover a random selection of areas in which research will be conducted, in the second, quotas of respondents will be selected.

Out of unrepresentative samples, the so-called "justified" samples are worthwhile due to the fact that they are applied to populations displaying unified demographic characteristics (e.g. youth, students, retirees). However, such research results cannot be applied to generalization in case of larger populations. What is more, one should be cautious while applying such results to the researched population.

Surveys based on the study of other unrepresentative samples should not be used in serious political science analyses. Important information, which should be considered while assessing the quality of a survey is the number of people in the sample of the researched group. The principle is that the larger random sample, the smaller statistical error. It is noteworthy that the precision of the research depends on the subject matter and the goal of the research. There will be different expectations concerning the precision level while studying the distribution of people's attitudes

<sup>&</sup>lt;sup>4</sup> In the realities of contemporary society, the problem is, however, an accurate and reliable sampling frame containing current data, e.g. about all those entitled to vote without people who have permanently left the country and do not vote (about 3 million people left Poland).

towards perceiving *in vitro* insemination as infertility treatment. This area may have statistical error of 5% or more, yet the reflection of attitudes will be sufficiently informative. Another level of precision will be expected during the last week before election. That result should be within 1% of error as compared with the final results of election. Such a precise result can be obtained if the sample will be 4 times larger than the usual 1,000 people sample. In this case, an error oscillates within 3% either way.

It needs to be pointed out that the principle of increasing the size of sample (as the method to reduce the statistical error) does not work if the sample had not been a random selection. Actually, the sample which is not a random selection increases the probability of larger statistical error. Statistical error (random), which is frequently mentioned, is characteristic to surveying and is relatively less dangerous since it is a controlled deviation factor in an outcome, as compared with the actual distribution of attitudes in society. It is more difficult to estimate the errors resulting from using improper system tools. An example may be a procedure for selecting a sample, large number of refusals to participate in research, inadequate realization of samples, improper construction of research tool. Information about such errors concerning erroneous systems is not accessible for anyone outside the research institution.

While using surveys for scientific purposes, it is worth paying attention to the index of sample realization and percentage of respondents who revealed their attitude to the given question, and those who did not provide the concrete response (e.g. "I don't know", "I don't remember", "hard to say"). Sometimes a question about the attitude, behavior, or political preferences can be construed as irritating, or causing disinclination to provide the answer. Difficult questions may result in politically correct responses, which may not necessarily be true.

#### RESEARCH TOOL

Operationalized research problem becomes a questionnaire. When using a research system provided by an outside research agency (which prepared this set of questions for general use), the interviewer should, first of all, check whether the set of questions constituted the basis of the conducted survey and whether the data obtained this way is significant.

Frequently often, voting preferences are the subject of analyses and political scientists' comments. They are cyclically measured by various research market firms. However, political scientists often concentrate on differences in terms of support obtained in surveys conducted simultaneously by several surveying institutions or realized within time intervals or, even worse, while doing research they deviate from the originally formulated questionnaires addressed to the respondents. This often results in serious misunderstandings concerning the interpretation, especially when analysts focus on the differences in support for individual options, disregarding the questions that constituted the basis of obtained results in individual researches. In

this context, it is important that the question about support for a given option is an opened question or a closed one: that the names of parties and their leaders are included in the question, what was the order in which parties' names and names of leaders appear, were responses rotated so the error resulting from the *primacy* or *recency* positioning of the names could be eliminated. The significance of the way questions are constructed is obvious. Was the question related to actual opinion or to potential attitude and behavior in upcoming election?; Were there prior questions related to the previous electoral behavior (effect of attitudes stability)?, or: Did the question concern past behaviors or not? Each of these pieces of information has a significant meaning and an analyst should not disregard any of them in order to be able to fully and conscientiously interpret obtained results. Distribution of responses is the consequence of not only the question, but also of other circumstances, for example, selecting the appropriate research tools. The most valuable for analysts are: full knowledge of exact wording of all questions, data concerning distribution of responses and their number. Particularly important in the context of researching voting preferences is acquiring the information not solely about who the respondents intend to vote for, but also about the percentage of voters who will actually cast their votes and about the percentage of the undecided. This information, when precisely analyzed, may help an analyst (commentator) to be cautious while assuming a higher level of support given to this or that party (at times it can be below the standard). Instead it will allow one to have a closer view at significant values important from the standpoint of possible and true voting behaviors of the society.

## TECHNIQUES OF DATA GATHERING

Among the pieces of information which have the influence on the assessment of usefulness, quality or comparability of surveys, a technique of material gathering is of particular importance. Techniques used can be identified as the ones based on direct and indirect communication. Direct communication with respondents is based on:

- face-to-face interview;
- computer-assisted personal interview (CAPI);
- phone interview;
- computer-assisted telephone interviews.

Indirect communication is based on questionnaires that must be filled in, they are:

- sent by post, attached to magazines, auditoriums survey, generally accessible;
- sent to e-mail addresses or they are interactively available on a web page [cf. Krzewińska, Grześkiewicz-Radulska 2013: 9–31].

Each of the above-mentioned techniques allows to obtain quantitative data reflecting public opinion. The specificity of collecting information in the framework of each technique may cause that obtained data may substantially vary. The most reliable data is obtained from a direct, face-to-face interview, conducted by the professional interviewer, with a randomized sample of respondents selected. The contemporary version of this technique, using a computer as a tool (CAPI), introduces new elements to the research process. These are: standard introduction, remote control over the interviewer's work, visualization of questionnaire content, automated coding and data entry and other elements. At the same time, it does not deprive this technique the basic ballast, namely it is the most costly and time-consuming method to acquire information when conducting surveys. All these considerations cause that research institutions rarely use such a technique to conduct political surveys.

For a dozen or so years, the Polish research scene has been experiencing a continual growth of telephone usage instead of face-to-face way to conduct surveys. The main reason for doing this is significantly lower cost of survey and less time devoted to the research. The end of the 1990s and the first decade of the 2000s generated various, not necessarily positive experiences resulting from over-the-phone surveys to predict the final outcome of elections. The attempts to reduce costs of researching caused that the elementary principles of surveying methodology related to proper selection of random sampling reflecting full coverage of the researched population were abandoned. The country's phone network and infrastructure (landlines) at the time were inadequate and it was impossible to obtain reliable results.<sup>5</sup> Even though the 1990s brought about changes in the availability of landlines and the increase in the number of landline phones – from 20% to 70% – was observed, it still did not meet the requirement.<sup>6</sup> After 2000, the landline telephone has declined due to the advancement of mobile network technology (over 80% of the population owns mobile handsets). However, high costs significantly limited possibilities to use them in survey researches. Only after 2010, high competition on the mobile phone market contributed to a reduction of cost of using mobile units which made it possible for survey-taking firms to include mobile phone owners into their data base. Therefore, the population representation at the level of 90% could be achieved.

Political science professionals' lack of trust in phone surveys is still significant, yet a report of independent scientists<sup>7</sup> which was aimed at assessing the work of opinion polling firms during the presidential campaign of 2010 and explaining the reasons why there were sizable variations between surveys and the final election result, demonstrated that over-the-phone research was more accurate than direct

<sup>&</sup>lt;sup>5</sup> The European Society for Opinion and Marketing Research (ESOMAR) advisors, while reviewing the conditions for conducting telephone surveys, indicated that their representativeness can be discussed only when the coverage of households by fixed-line telephony is at least 92%.

<sup>&</sup>lt;sup>6</sup> Compare the information contained on the Millward Brown portal: http://wybory.millwardbrown. com/partie-polityczne-parlament-krajowy/informacje/metodologia/najczesciej-zadawane-pytania (access: 13.10.2016).

<sup>&</sup>lt;sup>7</sup> The team was headed by Professor Henryk Domański from the Polish Academy of Sciences and included Professors Radosław Markowski, Zbigniew Sawiński and Paweł Sztabiński. The analysis covered 39 CBOS surveys, TNS OBOP, GfK Polonia, PBS/DGA and SMG/KRC. More information, among others, Stróżyk [2011].

interviews [Stróżyk 2011].<sup>8</sup> No longer than ten years ago, such a judgment could not face massive criticism, today, however, its credibility seems to increase. Especially if over the phone research is standardized according to CATI carried out with the use of both mobile phones and landline ones, which is additionally augmented by the characteristics observed in demographic subgroups. It is worth referring to the opinion of Stanisław Mirowski [2013], who in his report on CATI, which had been prepared while working on the project titled "Keeping Guard on Surveys", expressed the following opinion: "report of the commission led by Prof. Domański did not conclude that CATI-type of survey was superior to face-to-face technique of research". Face-to-face interviews are traditionally placed on the opposite side to CATI. It should, however, be understood that in real life direct interviews are conducted extremely rarely on randomly selected samples. Direct interviews are most frequently conducted on quota samples, too often by survey takers themselves, and (unfortunately) with respondents who are known to survey takers' circles.

In summary, taking into account over-the-phone interviews and in context of the quality of generated research material, it should be realized that there is no way that one can automatically form an opinion without more profound knowledge of the details.

Indirect techniques of gaining material knowledge in survey research (questionnaires) have two main advantages (they are inexpensive and quickly realized), but there is also a really long list of disadvantages, which almost undermine the entire credibility (low number of returned questionnaires, errors in covering the population by a sample, simplifying research questions, functional illiteracy of respondents and other drawbacks). Among the above-mentioned techniques of conducting a questionnaire, a researcher can – but not without some reservations – use an interactive questionnaire using an Internet web page. Reservation concerns, first of all, the absolute necessity to verify every time the coverage of analyzed population in terms of demographic parameters of a sample and these are: age, sex, education and, if this is significant for the subject of research, information about respondents' places of residence. Computer-assisted web interviewing (CAWI) methodology is fully explained (theory and practice) as "web survey methodology" [Callegaro et al. 2015].

<sup>&</sup>lt;sup>8</sup> In 2006, in discussions held while creating the OFBOR association after the 2005 elections, before which nearly all research institutions mistakenly pointed out the winners, the following principle was pointed out: "Measurement of political preferences, if presented as representative for the general voters, should be conducted on a representative sample, using the interviewer technique at the respondent's home. Tests by other techniques (e.g. on the telephone or in the street) cannot be presented in a way suggesting that they have the same representativeness as the representative sample". See recommendations of the Management Board of the Polish Association of Public Opinion and Marketing Research Firms for researchers and the media announced during the debate entitled "Polls and Media", which took place in the editorial office of "Rzeczpospolita" on May 17, 2006.

#### CONCLUSIONS

One of the basic requirements of each research venture should be an attempt to objectively present and describe a researched issue. In this respect, surveys are an especially risky instrument. If the survey is conducted or used improperly, there may be a risk of distorted picture of reality. Besides the above-described questions of methodological and technical nature, it is worth taking into account other circumstances, which may be significant for proper interpretation of survey results. The circumstances in which research is conducted are fundamental. Results derived under peaceful social circumstances, when respondents are able to give answers devoid of emotions and they are not afraid of questions concerning political attitudes, should be interpreted one way. But when the situation is tense, political conflicts sharp, mass media air spectacular news stirring up emotions and fueling divisions among population, responses will not be easily evaluated. Such circumstances may be responsible for even several-percent changes of opinions in cyclically conducted researches and should not be interpreted as a radical change of attitudes, but momentary fluctuations caused by a particular situation. Such an example can be the result of cyclical research conducted by CBOS in September 2014 concerning social moods in relation to politics and economy after Donald Tusk was elected to the position of President of the European Council. This survey showed change in social moods from negative to positive by as much as 12 percentage points [CBOS 2014].

Another issue which deserves attention is the way questions are formulated and the way they are directed to the respondents. Such questions may concern theoretical situations, which they did not experience, and their responses depend on an individual's imagination and consciousness. A similar case is with notions, which may take various shapes and forms. This is the case, which is germane to important researches concerning Poles and their attitudes towards democracy. It appears that when it comes to understanding the notion of democracy, Poles perceive this word in two different ways. Some view this notion as referring to unlimited citizens' freedoms and voting rights, whereas for others such a notion is related to the state's responsibilities to take care of people's well-being [CBOS 2010].

Political surveys focused on preferences for this or that party are rarely connected with measuring general interest in politics among respondents, which as a variable, could allow making survey results more real, especially during times of political instability.

A frequent subject of interest of political scientists is ideological self-identification of respondents, taking into consideration political spectrum, i.e. left wing, right wing or the center. As for the Polish political scene, the situation is that ever since the time of transformation (the beginning of the 1990s), not even once an identical list of parties running for two subsequent elections was repeated. Therefore, basing interpretation of respondents' ideological attitudes on their self-classification may be risky.