# ELECTORAL STUDIES: UNDERSTANDING SOME RESEARCH PROBLEMS 

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#### Abstract

This paper discusses the problems researchers experience in conducting electoral research. One approach researchers use in conducting electoral studies is quantitative with the use of empirical data while another approach would be qualitative. Researchers show preference for mixed methods, incorporating both the quantitative and qualitative approaches as the research areas have become more complex. A proper method selection is required and the nature of the research problem identified. The methods used would depend on the objective of the study, the resources and the expertise available. One research area using quantitative research is Agenda Setting that used survey and content analysis. Agenda setting studies the effects of the media on public opinion to explain for political behaviour. Public opinion would require the use of survey as a form of methodology to seek what people perceive of current issues and what issues were deemed important when making voting decisions. Using scales in conducting longitudinal research would obtain a more meaningful perspective.


Keywords: agenda-setting, content analysis, democracy, electoral studies, survey, mixedmethods

## INTRODUCTION

The aim of this paper is to discuss the problems researchers experienced in conducting research in political communication. Admittedly political communication is a big subject inviting scholars to provide various research methods such as surveys, content analysis, focus group methods, experimental and field methods. Generally one can group the methods into two, the quantitative and the qualitative, the former requiring some deep knowledge of statistics while the latter a deeper analysis and insight of the subject. Of late another research approach is advanced, namely the mixed methods, which incorporate elements of both quantitative and qualitative (Creswell, 2014). The mixed methods approach has become popular in the United States and Europe due to its ability to address the research problem comprehensively. Scholars have found that contemporary issues have become more complex to be examined from the quantitative and qualitative perspectives (Ivankova, 2015). The problems may appear different by other scholars in other parts of the world, but there are common grounds that Malaysians can learn from their foreign colleagues.

## METHODS

Several approaches are inherent in conducting research. Research approaches are ideas, plans and procedures from the initial stage of assumptions to data collection, analysis and interpretation (Creswell, 2014). Consideration is made on the proper selection of method used
and in the nature of the research problem that has been identified. The methods used would depend on the objective of the study, the resources and the expertise available.

The method is the "how to" conduct the research but the important objective in the research component is why it should be conducted initially. One need to have a clear objective to begin a research project. Once the objective is explicit then the researcher can decide on the appropriate method to conduct his research.

Scholars posit many reasons for conducting research, but there must one core purpose. A statement must be made to establish the intent of the entire research study.So studies could place statements indicating the objective, the purpose or the aim of the study so that readers know what areas of research would be covered. The general purpose of research is to gather information. It can be a research to gather information for someone, an authority, or a commercial organisation. It can be a research to provide such information for the scholar's own benefit. It is therefore clear that research can be conducted for a third party or is conducted for our own personal consumption. For example, the government is interested to know the effects of Goods and Services Tax (GST) on consumer spending and therefore asks that a research be conducted by a certain university. The researcher therefore conducts the research on behalf of the government.

On the other hand, the researcher with academic issues to be solved knows that they are only of interest to him and his academic colleagues. So he laboriously does research to answer the questions that he has given to himself to answer. A scholar who conducts a research in a particular area is self driven, propelled by an academic curiosity that he and his learned colleagues know the academic outcome.

Various forms of research exist. The first form of conducting research could be descriptive.It would provide a picture on how families spend their income, or how much time families spend time in watching television or how the young is found to be spending time with their smart phones. It could be a baseline study to gather basic information.

Many social enquiries in the form of research are conducted to explain rather than to describe. Explaining events go beyond describing the occurrence of such events by suggesting some relationships. Their function can be theoretical - to test some hypotheses or to be practical (to understand why voters reject certain issues or voters identify issues with certain parties).The overall purpose is to provide an explanation as to why there is a relationship between or among a number of variables.

Another form of research is merely to provide an understanding of events that happened in society. There could be a relationship of two variables but the relationship was provided for an understanding, not the reason for such an occurrence.

Research findings come from well thought of research designs. Fact collection is no substitute for a thought of or a well-planned research. It is has to begin with an objective in mind, a time schedule and a strategy to be executed.

Surveys have their own usefulness in formulating and testing hypotheses. Their function in a given research depends on how much is already known about the subject and the purpose for which the information is required.

Researchers face numerous problems when they conduct research. Early researchers may face problems that are far different from the problems faced by senior researchers when they are confronted with complex issues over the years.

Having conducted research over a period of years, this paper would highlight some of the problems in conducting research in Malaysia. It would highlight some of the problems in using different measurements on concepts. There is also the call for a more longitudinal research over the commonly held cross sectional studies.

## BACKGROUND OF SURVEY RESEARCH

Survey research on the audience is not a recent phenomenon. The British Broadcasting Corporation (BBC) had a Listener Research Department to collect information about the listening habits and tastes of the British audience in 1936. Not far behind is Malaysia which also had some sort of an audience survey way back in 1936. So Malaysia had joined the ranks of countries that were concerned with obtaining feedback from the radio programmes aired to the people.

In the United States, public opinion polls were well associated in market research and in audience research. Social Surveys (Gallup Poll) founded in 1936 as the British Institute of Public Opinion conducted monthly polls and made forecasts of general and public opinions. So having opinion polls of the general public is not a recent phenomenon. The difference between now and in the past is the number of marketing and public opinion companies that are engaged in conducting surveys to gauge the opinion of the British population and the frequency in the conduct of polls.

In Malaysia, the feedback for the government is obtained from several sources. The Information Department is one of the sources for supplying information to the Ministry on the reactions of the public on government announcements. Of and on, the government does conduct surveys or commission agencies and universities to conduct surveys on specific matters to gauge and to understand the feeling of the general public.

Having noted the background of research, this paper will move on to other issues. We will discuss the issue of (1) coverage; (2) the problems in conducting interviews in a multi racial society; (3) measurements; and (4) the benefits of a longitudinal research.

Research on politics and on elections is not recent. Ratnam (1965) is an early researcher who studied and analysed the first general election in 1959, followed by another study on the 1964 elections (Ratnam\& Milne, 1967). The method focused on the institutions (political parties) and an analysis of their voter outcome. It was only in later years that survey methods and content analyses were made (Idid, 2011).

## Coverage

Surveys differ in covering a given population. Thus one can be interested in the adults who are eligible voters or on those who use the social or on line media for commercial transactions. Identification of the survey population is important to make inference from the sample. The collection of a survey can range from a few case studies to a more greater enumeration. Hence the researcher must first settle the extent to which he wishes to generalize
his findings. There are surveys in which representation is of minor concern but in other circumstances, it is of major importance.

We have conducted several research projects but the interest has always been nationwide in understanding the Malaysian voters. We were interested to know voter acceptance of parties, leadership and issues. But there were occasions when a research was confined to analysing voter perception of issues at the state level or even at the constituency level. Recently we chanced to do three studies on what voters in Sarawak perceived of the issues, their concerns and their thinking of the future of the state. So the interest was state wide rather than nationwide.

The number of respondents at the nation level would be higher than the number of respondents of studies conducted at the state level. For example our nationwide studies would invite 1,400 to 2,000 respondents coming from various constituencies throughout the country. In the study that we did in Kedah in 1999 we had more than 1,200 respondents while our recent study in Sarawak had about 1,200 respondents coming from various state constituencies. The number of respondents was affected by the terrain of the constituencies. In Sarawak, access to the rural areas were challenging, with the enumerators having to go by boat and, at times, with no access road, they had to walk for several hours to interview their respondents that were assigned to them.

The coverage has to understand the characteristics of the population, taking into consideration various characteristics like race, religion, gender and occupation. So nationwide, our studies would lay emphasis on race and religion, gender and income, but in Sarawak, the ethnic communities, religion (Muslims, Non-Muslims), income, gender and occupation had to be considered. In a study in Kelantan, the composition of race and religion may not be that critical as nearly all the voters were Malays and were Muslims.

The study using Agenda Setting as the theoretical framework necessitated two types of methods, namely survey and content analysis. Agenda setting requires studying media effects on public opinion to explain for political behaviour. Public opinion requires the use of survey as a form of methodology as researchers seek to know perception of current issues and what issues were deemed important when making voting decisions. Content analysis is to examine the issues and the prominence raised by the media. The researcher would then have to correlate the findings between the two methods to suggest media effects on public opinion.

In a majority of our studies, the public opinion was gathered from the voters generated country wide, while the content analysis was made on different types of language-based newspapers such as English language (The New Straits Times, The Star); Malay language (Utusan Malaysia and BeritaHarian); Chinese language (Sin Chew and Nanyang Siang Pau) and the Indian language newspapers (Nanban and Tamil Nesan) (see Idid \& Chang, 2012; Idid, 2011; Idid, 1999). We had conducted studies using agenda setting way back in 1999 to have a general idea that media do not really have a strong effect on the audience.

In our agenda setting studies, common issues had to be tabulated and categorised to understand the common issues raised by public opinion and in the news reports. A ranked correlation is therefore made between the public issues and news reports. It has been a challenge for us to come out with common issues for the two component populations. We were able to derive common issues in the coding sheet when we code the issues raised by the public and the issues as reported by the press in the discussion held in 2012. The common
issues were then made available to members when we conduct the research on agenda setting for the 2013 General Election.

The recent issue (see special articles of Jurnal Komunikasi, 33 (2)) carried several articles on Agenda Setting conducted during the 2013 elections (Idid, 2017; Aini Maznina et al., 2017; Chang et al., 2017; Zeti Azreen et al., 2017; and Hasmah Zanuddin et al., 2017). The findings showed agenda setting among the general population and another series analysed agenda setting for the various race components (Malays, Indians and Chinese). It suggested that agenda setting issues were raised differently among the race component groups than the general population.

## Response

Response here covers response rate and the nature of response itself. The response rate has been affected by the method and the questionnaire used, and the quality of the enumerators. Training is important for the enumerators as they have to make contact with respondents from different backgrounds of race, occupation and education.

For decades, survey research has provided trusted data about political attitudes and voting behaviour, the economy, health, education, demography and many other topics. But political and media surveys are facing significant challenges as a consequence of societal and technological changes. These changes are affecting the validity of data collection.

It has become increasingly difficult to contact potential respondents and to persuade them to participate. The percentage of households in a sample that are successfully interviewed - the response rate - has fallen dramatically. At Pew Research, the response rate of a typical telephone survey was $36 \%$ in 1997 and is just $9 \%$ in 2012 (Pew Research Center, 2012). The response rate using the interpersonal survey is still at a high rate as respondents are able to see for themselves the enumerators and be convinced of the research project.Using quota sampling would be a better way to maintain a higher level of response rate than using selection through simple random sampling.

The higher response rate found among face to face surveys is in contrast to the response rates for internet surveys that have been reported to have a low response of 6 percent to 75 percent (Hewson et al., 2003). Thus different methods invite different response rates due to varying factors.

The general decline in response rates is evident across nearly all types of surveys, in the United States and abroad. At the same time, greater effort and expense are required to achieve even the diminished response rates of today. These challenges have led many to question whether surveys are still providing accurate and unbiased information. Although response rates have decreased in landline surveys, the inclusion of cell phones - necessitated by the rapid rise of households with cell phones but no landline - has further contributed to the overall decline in response rates for telephone surveys.

## Overall Scenario and Training

There has been no or minimal discussion on research methodologies in Malaysia because such a discussion would open up areas for researchers to learn from one another to enable them to conduct better research in the future. What can we learn from our research experience in

Malaysia? There are several aspects in conducting research in Malaysia that can be taken as lessons for others to follow or to avoid.

The first factor is in the overall scenario of research in Malaysia. Collecting data from Malaysians is not new. The colonial administrators had collected numerous kinds of data, ranging from medical habits to spending beliefs among the natives as they had expressed interest in the administration of the native land. Universities have been conducting research since the founding of Universiti Malaya in Singapore and in Malaya (Tham, 1981).

Political questions could be more sensitive than asking questions on eating or medical habits among the Malaysians. Matters though have been changing. Malaysians have become more willing to answer politically sensitive questions than before. Way back in the 1980s when we conducted our survey on party choice, people then were either reluctant or were very suspicious when asked about their voting choice. Which party would you choose? It was difficult for them to provide an answeras they would not like to disclose their choice of party claiming it should be kept a secret.

But matters have changed since 1990sdue to several factors. One factor was with the formation of new political parties such as Semangat 46 and later with the formation of Barisan Alternatif where voters expressing their support for new parties precisely because these were new. It could also be because of the political maturity that was setting in the country with more Malaysians receiving education than before. Political competition was evident among the voters when the fight to gain the Malay votes became more keen. The Malay mind opened up. The younger Malays and the rural Malays realised that besides UMNO there could be another party for the Malays. Yusoff Kassim in his book termed the development to be "politik baru", but the political atmosphere had seen a change. One did not realise that political development had repercussions on the manner in which voters were willing to respond and make known their views to others even among strangers as evidence when we conducted our surveys.

The second factor in opening up the mind in Malaysia is the rise of a new crop of voters whose party identification is rather loose. The new voters are not attached to any party or to the party of their parents but chose to have an independent mind. They might not even affiliate with the party of their parents. Political theorists in America based their predication on party identification, predicting voting would be similar to the party of their parents. The Malay elders had only two parties of choice: UMNO and PAS, but the new generation is less connected to the two parties and also had other parties to choose.

Party supporters were suspicious of our enumerators. If they were PAS supporters they were suspicious that we were government agents asking for information on their following. If they were BN supporters they were suspicious that from the university, we were assumed to be working for the opposition on the assumption that students and lecturers were mainly not pro BN.

Among the Malays, those who reside in the rural areas, the uneducated Malays are more forthcoming. They are willing to answer questions. They are also patient with the enumerators perhaps time was on their side. But the time given for the interview would be more compared to the urban respondents who are always busy. The kampong respondents were willing to talk even though the interview was over.

The Bumiputras in Sabah and Sarawak are also willing respondents as they treated the enumerators as their guests. They were willing to give the answers as best they could. There were also occasions when they were suspicious but generally the rural voters were more forthcoming.It was also easier to interview the Indians. They were frank in giving their answers.It wasmost difficult to obtain answers from the Chinese as they are very suspicious of anybody, mainly those who do not speak their own dialect. Suspicion would be high if the enumerators were from another race, especially the male Malays. If race based suspicion is one factor it is also confounded by another fact that Malays as the enumerators were mainly regarded as government officials (perhaps from the police) to tap their political inclination.

Urban respondents from all race groups are more difficult to obtain than those from the rural areas. The main constraint was on the location. Respondents living in the gated community, in the condominiums or in the housing areas were more difficult to be interviewed. We also had difficulty in reaching them as they were also not at home, either spending time in the malls, or in the market during the week ends. As our interviews would be conducted in the weekends, respondents, if located, were keen to complete as fast they could so that they could have the time to spend time with their family. One can also say that it was easier to obtain cooperation from an educated young than the educated elders.

One has to understand these factors as it became necessary during the training session with the enumerators everytime we begin our new project. Malaysians are sensitive so many precautions had to be told to the enumerators to abide. Interviewer-interviewee interaction is important to enable the enumerators to obtain accurate answers.

## Question Wording

Words used were important to elicit answers from the respondents. Given the multiracial community, surveys have to be sure that words convey similar meanings to respondents from different race or religious backgrounds. Discussions on the different understanding or misunderstanding of words in the questionnaire need to be thoroughly discussed among academics in Malaysia.

Sometimes, it is not clear how a question should be worded. In 1987 a Gallup poll was conducted with 4,244 American adults to get their opinions about American politics. One of the questions inquired about each respondent's concern for the outcome of the 1988 election. The question was asked in two different ways, each to half the respondents. Onehalf asks on party and the other asks on the candidate. The question wordings and results are below:

Table 1: Alternate question wordings

| Alternate Question Wordings |  |
| :--- | :--- |
| Version 1: "Generally speaking, would you say that you personally care a <br> good deal which party wins the presidential election in 1988 or that you <br> don't care very much who wins?" |  |
| Care a good deal | $54 \%$ |
| Don't care very much | $40 \%$ |
| Don't know | $6 \%$ |
| Version 2: "Generally speaking, would you say that you personally care a <br> good deal who wins the presidential election in 1988 or that you don't <br> care very much which party wins?" |  |
| Care a good deal | $76 \%$ |


| Don't care very much | $20 \%$ |
| :--- | :--- |
| Don't know | $4 \%$ |

Source: Ornstein et al. (1988)
Question wording is also important. Words and sentences have to be simple for respondents to understand. At one time we had knowledge based questions but we found them to be sensitive to the low educated. They felt that they had been humiliated when they were unable to answer questions posed by the student enumerator.

## Measurements and Scales

In measurement, researchers assign numbers to object or events by obeying certain rules and procedures. Kerlinger (1973) discusses at length the problems of applying measurements in social sciences. Numerical labeling in terms of scales have been used by researchers to measure intensity. It is relatively easy to ask a respondent whether he agreed or disagrees with a statement regarding an issue as the nominal answer would answeredwith ease. But try it with a four scale or use a Likert or Likert -like scale. Or increase it to a measurement on a 1 to 100 or use the Osgood Semantic differential scales. Psychologists and statisticians would prefer a more intensive scale.

Changes in scale may invite changes in the answer given by the respondents. An example is given when we used to measure voter agreement with the 1Malaysia concept. The concept 1Malaysia introduced way back in 2009 was a very strong appeal with many Malaysians welcoming it as a slogan to unite the community toward nation building. Eventually through an overuse by many quarters, the concept lost its appeal. When we measured the strength of the appeal at the early stage, we used a four point scale 1. Disagree very much; 2 . Disagree; 3 . Agree; and 4 . Agree very much.

Agree with concept of 1Malaysia (Scale: $4>5$ )


Figure 1: Agree with concept of 1Malaysia

From 2009 to 2012 we used a four point scale, ranging from "Do not agree totally" "Do not agree ", "Agree" and "Very much agree". If you add the score of those who agree
and strongly agree, it is 80 percent in 2009, 75 percent in 2010, 85 percent in 2011 and 84 percent in 2012.

In 2013 to 2016 the scale adopted was five with the addition of "Slightly agree" introduced after "Do not agree". The percentages for "Agree" and "Agree very much" fell to 42 percent in 2013, 41 percent in 2015 and 57 percent in 2016. The response to "Slightly agree" had taken away some 44 percent in 2013, 34 percent in 2015 and 24 percent in 2016.

Adding an additional scale is at times needed but one must be cautious in the introduction. If we had used a nominal measurement 1: Yes and 2: Disagree, then we would be inclined to believe that voters would be swayed to say 1: Yes than 2: No.

## Longitudinal Studies

Most of the studies are cross sectional. We would suggest longitudinal studies, preferably panel studies. We were fortunate to obtain funding that gave us some lee way to conduct longitudinal studies. A case in point was the studies we conducted to measure voters' acceptance of 1Malaysia (and also the concept of Vision 2020) over a long period of time from 2009 till 2017. The answers gave us a good understanding of the changes to the acceptance of 1Malaysia (and Vision 2020).

Longitudinal studies enable us to understand the changes, but the disadvantage is that we could not tell who had changed unless panel members had been used. This was rectified with the analysis made of subgroups. If subgroups changed one can suggest the changes best occurred at certain sub groups.

Take the study we made on people's satisfaction with the democratic system of government in Malaysia over a period of time, which is from 2006 to 2012. We were able to ask voters what they thought of the democratic system in that they were; 1. Strongly dissatisfied; 2. Dissatisfied; 3. Can be improved; 4. Satisfied; or 5.Strongly satisfied.

Satisfaction with the Democratic System in Malaysia


Figure 2: Satisfaction with the democratic system in Malaysia

The answers suggested that from 2006 to 2008, Malaysian voters were satisfied with the democratic system in Malaysia, but this slowly fell to 48 percent in 2010 and 53 percent in 2011 but rose again to 57 percent in 2012 (similar to the percentage in 2006). But it can be noted that the answer to "Strongly satisfied" fell from 11 percent in 2006 to 6 percent in 2012.

## Mixed Methods to Be Considered

A new thinking now is to combine empirical research with qualitative research called mixed methods. I was moved with the idea of having focus groups way back in 2008 when we did a study on "Belia Tidak Berpersatuan" (Youths Not belonging to Any Society). We conducted several focus groups among the young and had these findings with the survey that we did among the respondents. We found that the mixed method provided a better perspective than just the quantitative survey.

When do you use qualitative and quantitative research? We combined both the methods as we more or less did the two at around the same time.

One has to understand the context of the research project. In exploratory project, we would recommend the qualitative research be conducted here to extract the relevant concepts and provide some ideas on measurement for the survey questionnaire. Even then we need to conduct a pilot study before the actual study is conducted. When we conducted the study on the public servants we had the focus groups to give us ideas for inclusion in the questionnaire. So by the time we constructed the questionnaire we had good understanding of the thinking and feeling of the public servants toward the numerous issues they faced.

## CONCLUSION

Empirical study has its role, but it is not the only method. Although empirical survey is popular in Malaysia, there are some developments that one must take into consideration. The scenario has changed in the country to enable political surveys to be conducted among the voters, but one must be cautious that the various communities still harbour prejudices against enumerators whom they suspect to be playing different roles rather than the role of an enumerator. Some respondents regard the enumerators as government officials out to know their party choice. Some toldus that they fear the enumerators to be sales people out to get them to make a purchase.

Question wording, and measurements need to be well taken care of when surveys are being conducted. Different measurements may provide different answers in different categories compared to the answers previously.

A case is made that researchers should conduct longitudinal research to understand the changes that are happening in our society. Panel studies are recommended to understand the dynamics of change happening, giving an idea who had changed over the period of time. In the absence of panel studies, an analysis of subgroups would indicate the changes that had happened in society.

## REFERENCES

Aini Maznina A. Manaf, Malia Taibi \& Kamaruzzaman Abdul Manan (2017).Media agenda and public agenda: a study of issues during the 13th general election. Malaysian Journal of Communication 33(2): 13-26.
Chang, P. K., Ali Salman, Kho, S. N., Mohd Rizal Mohd Yaakop, Rasaq M. Adisa, Ong C. H. (2017). The agenda setting function of English newspapers during the 13th general election. Malaysian Journal of Communication 33(2): 27-39.

Creswell, J. W. (2014). Research design: Qualitative, quantitative and mixed methods approaches (4th ed.). Los Angeles: Sage.

Hasmah Zanuddin, Tham, J. S., Fauziah Ahmad, Badrul Redzuan Abu Hassan, Julia Wirza Mohd Zawawi, Norliana Hashim, \& Muhammad Badri Ishak (2017). Burying the news for the public: agenda cutting of the Tamil newspapers and MIC candidate Facebook during the 13th general election.Malaysian Journal of Communication 33(2): 55-72.

Hewson, C., Yule, P., Laurent, D. \& Vogel, C. (2003). Internet research methods: A practical guide for the social and behavioural sciences. London: Sage.

Idid, S. A. (1999). Analisiskandungan.Bangi: Jabatan Komunikasi, UKM.
Idid, S. A. (2011). Peranan media massa dalam pilihanraya umum. Kuala Lumpur: IIUM Press.

Idid, S. A. (2017). Agenda setting: Probing the issues during the 13th general election. Malaysian Journal of Communication 33(2): 1-12.

Idid, S. A., \& Chang, P.K. (2012).The media and public agenda among the Malay and Chinese communities during the 2008 Malaysian General Elections. Asian Social Science 8(5): 107-115.

Ivankova, N. V. (2015). Mixed methods applications in action research: From methods to community action. Los Angeles: Sage.

Kerlinger, F. N. (1973). Foundations of behavioral research. New York: Holt, Rinehart and Winston.

Ornstein, N.J., Kohut, A., \& McCarthy L. (1988).The people, the press and politics: Times/Mirror study of the American Electorate. Reading, Mass.: Addison-Wesley Publishing Co. Inc.

Pew Research Center for the People \& the Press (May 15, 2012). Assessing the representativeness of public opinion surveys. Retrieved from http://www.people-press.org/2012/05/15/assessing-the-representativeness-of-public-opinion-surveys/

Ratnam, K. J. (1965). Communalism and the political process. Kuala Lumpur: University of Malaya Press.

Ratnam, K. J., \& Milne, R. S. (1967).The Malayan parliamentary election of 1964. Singapore: University of Malaya Press.

Tham Seong Chee (1981). Social science research in Malaysia. Singapore: Graham Bash.
Zeti Azreen Ahmad, Ismail S.Y. Ahmed, Hartini Wakichan, Hazwani Halem, Siti Haslina Hussin, Mutiu Adekunle Ganiyu (2017). GE 13: The influence of ethnic newspapers in shaping the opinion of Indian and Chinese voters. Malaysian Journal of Communication 33(2): 40-54.

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