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SURVEY RESEARCH IN THE SOCIAL SCIENCES

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Abstract

This article focuses on the question of survey research in the social sciences. It is a unique method of data gathering in the social sciences, which involves the use of questionnaire and interview techniques. The questionnaire technique involve the use of instruments ranging from the loosely structured, highly structured, open-ended to closed-ended questionnaires that aim at collection of quantitative data. While interview technique includes the use of personal interviews, ranging from schedule-structured, informal, unstructured, to telephone interviews. This paper shows that that survey research is the main method for a social scientist with numerous strengths despite some weaknesses. In conclusion, the paper argues that survey research method can be adapted to the emerging advancements in science, information communication and technology.

Keywords: Survey research, questionnaire survey, interview survey, survey instrument, social sciences

Introduction

Survey research is one of the most important research methods in the social sciences. In a number of sources we get various definitions of it. One such source, is *Collins Dictionary*, which defines survey 'as an action word that may mean to view or consider something in a comprehensive or general way; to examine carefully as if to appraise value; to plot a detailed map of an area of land by measuring or

calculating distances and height. It also refers to inspecting structure such as building to determine its condition and value' (Collins, 2006:1621). In these definitions we get the idea of estimation and valuation of condition of something. Social scientists try to 'inspect' human populations in order to evaluate the condition of interest through survey. Another source, is *Chamber's Dictionary of Science and Technology,* which defines surveying as 'measurement of the relative positions of points on the surface of the earth and or in space, to enable natural and artificial features to be depicted in their true horizontal and vertical relationships by drawing them to scale on paper' (Walker, 2002:1133). Although, it may refer to land surveying, this definition resonate well in the social sciences' usage of the word survey. That is, it implies an attempt to measure, scale and evaluate the social and cultural phenomena to understand and represent them in whatever way.

Furthermore, the *Oxford Dictionary of English* provides a clearer meaning of 'survey' which it defines as 'an investigation of the opinions, behaviour among others of a particular group of people through asking of questions' (Hornby, 2015:1525). This is similar to the usage of the term in the social sciences. 'Survey' is synonymous with 'social survey', 'survey method' and 'survey research' (Jary and Jary, 2000:625). These scholars argue that survey research is a social science technique that uses questionnaires or interviews and their analysis with the aid of various quantitative and statistical techniques, to describe a population's principal characteristics such as age, sex, occupations and attitudes and to test hypotheses and examine relationships between variables under study. Some other scholars seem to concur with this argument. For instance, Craig Calhoun defines survey as 'a basic research methodology in the social sciences, which is based on questionnaires and interviews. This involves selection of a sample (or cases) from a target population, through a technique known as sampling, from which to gather data that represent those of a larger population under study' (Calhoun, 2002:473). Because survey research focuses on a small sample of a population, there is often an assumption of increased accuracy compared to a census, which focuses on the entire population in an area, community, region, town or country. Some scholars have argued that survey research aims to make observations in a small group of a population. But, because of the nature of some sociological phenomena studied by social scientists, such as gender relations, religious and political affiliation, and prestige, cannot be observed directly, social survey researchers collect their data by asking people who have experienced the phenomena under study. From responses of their study subjects,

researchers can attempt to reconstruct those people's experiences (Jay and Jay, 2000; Frankfort-Nachmias and Nachmias, 1996:225). Finally, survey research focuses more on 'individuals' rather than 'communities', this has often led some scholars to accuse survey research of being atomistic (see, e.g., Jay and Jay, 2000:26).

Survey Research Instruments

In the foregoing section of this work, it has already been pointed out that survey research involves the use of questionnaires and interviews in collection of data. In social sciences, the questionnaire and interview are also known as survey research 'tools or instruments' and are usually dependent on the nature of the research questions and places (or sites) of study. The data are collected through a process of research known as fieldwork, which involves collection of data in the field and the study of human institutions, characteristics and behaviour in natural settings (except for unobtrusive library and archival research). Although the main scientific technique is observation, as already noted, some phenomena of interest to social scientists cannot be observed directly; the researcher asks people about their 'experience' of the phenomena under investigation (Frankfort-Nachmias and Nachmias, 1996). In the subsequent sections of the paper, I attempt a detailed discussion of the questionnaire and interview surveys.

Questionnaire Survey

The questionnaire survey involves the use of an instrument that has categories of words to which respondents react. Conventionally, questionnaires are filled by the respondents and returned to the researcher. There are several types of questionnaires, for example, the group questionnaire that is addressed to a group of people and those addressed to individual persons. We also have privately-filled (self-administered) questionnaires and mail questionnaires to be filled by respondents and returned through postal mail. The mail questionnaire is an impersonal survey tool, where the researcher samples postal addresses and distributes questionnaires through postal mails. According to Frankfort-Nachmias and Nachmias (1996:225-26), the mail questionnaire has some advantages; one of which is that it is cheap in planning, sampling, duplicating instruments and providing stamped self-addressed envelopes for the return mail. Secondly, it does not require an interviewer in the field and it

is easier to analyse the data. Another advantage lies in reduction of biasing error associated with interviewers. The mail questionnaire is also important as it offers greater anonymity to the study subjects particularly on 'threatening issues of study, for instance, variables such as sexual behaviour and child abuse. For considered answers or some questions that require consultation of personal documents, the respondent has the time to consult or even discuss with other people. The mail questionnaire can cover wide geographic contacts at minimal cost and is therefore appropriate for a widely dispersed population.

Despite these strengths the mail questionnaire also has some disadvantages. According to Frankfort-Nachmias and Nachmias (1996:227), one of these weaknesses is that the mail questionnaire needs simple questions that are straightforward enough to comprehend only on the basis of printed instructions and definitions. The researcher does not have an opportunity to probe the respondents. Whatever answer given by the study subject, will be accepted as final. Another disadvantage is that the mail questionnaire does not provide the researcher with the opportunity to control the filling out of the questionnaire. Finally, the mail questionnaire may have low response rate (this is the percentage of respondents who return the questionnaire to the researcher, usually 20-40% without follow up). People who are itinerants, the elderly and those with low educational level are known to have high rates of non-response to questionnaires. There is usually need for the researcher to make follow-ups on the questionnaire just one week after mailing them.

Scholars have identified a number of factors that affect the response rate of the mail questionnaire. For example, Frankfort-Nachmias and Nachmias (1996) state that sponsorship of the study affects the response rate. In the United States of America, for instance, government-sponsored questionnaires such as the Bureau of Census surveys record high rates of 95%. In addition, inducements such as appeal for goodwill, offer of reward and attaching letters of support from professional associations increase response rates. Also convincing cover letters that explain sponsorship and purpose of the study may improve response rates. Other factors that affect response rates include type of mailing that is legible, aesthetically appealing, as well as timing of the survey. There are, however, some strategies that researchers can use to improve the response rates of mail questionnaires. One such strategy is known as the Total Design Method (TDM) which involves a step-by-step procedure that takes into account instrument construction and survey implementation with strong accent on follow-ups

(Frankfort-Nachmias and Nachmias, 1996:228). The TDM involves not only designing the research instrument in away that is aesthetically appealing to the respondents and legible or attractive printing on the envelopes, but also sending out a series of follow-up mails to the respondent about one or two weeks after the questionnaire is sent, and selection of cases from particularly specialised groups so as to obtain heterogeneous and homogeneous samples.

Interview Survey

In addition to the use of the questionnaire discussed in the previous section, a survey researcher can use an interview instrument. Survey interviews range from informal, personal, structured, semi-structured, focused, to telephone and online interviews (Frankfort-Nachmias and Nachmias, 1996; Bernard, 2006; Babbie, 2013). The personal interview is held in face-to-face and in interpersonal situations. In other words, it is obtrusive or intrusive to the study subjects. It involves the researcher asking respondents questions that are aimed at eliciting answers to variables. Personal interviews include scheduled-structured, focused and non-directive interviews. The scheduled-structured interview is fixed and least flexible. The interview questions and their wording remain identical. The interviewer cannot clarify a question that may be unclear to the respondent and sequence of questions remains the same as designed. The focused interview is also called non-schedule-structured interview. It targets respondents known to have been involved in a particular experience and refers to situations already analysed before the interview. It is executed with an interview guide specifying topics under study. The researcher can probe points that are not clear. An example of this interview was used by Stacey Oliker in 1989 to study ‘Best friends and marriage’ (Frankfort-Nachmias and Nachmias, 1996). The other type of personal interview is non-directive interview or non-structured interview (Bernard, 2006); it does not use the schedule and it has no direction. The respondents in this interview have control of the situation under discussion. The researcher has great freedom of probing the respondent. In anthropology, a number of researchers have used this interview, for example, Eleanor Miller in her study of female street hustlers culminating in her work, *Street Woman* (1986).

Personal interviews have a number of advantages, for instance, there is room for flexibility, that the researcher can clarify wording of questions, control order of the questioning process and probe the respondent for additional data. Secondly, control over the interview situation

means that questions can be answered in an appropriate sequence and the respondent cannot consult friends or documents in order to respond to a question. Thirdly, there is high response rate compared to mail questionnaires. Finally, the researcher can collect supplementary data that are of interest to his or her study. There are, however, some disadvantages associated with personal interviews, for example, the cost for personal interviews is very high, that is, selecting and training interviewers and supervising and travel allowances make the cost very prohibitive. There is also the cost of transcribing, processing and analysing the data. Additional devices such as voice recorders make the cost of the survey even higher. Some other disadvantage of the personal interview has to do with interviewer bias arising out of selective interviewing of respondents. Also, lack of standardisation of the instruments means that it is difficult to generalise about the problem under study and this frustrates the scientific principle of generalisability. Face-to-face contact between researchers and respondents means there is lack of anonymity. Finally, respondents may refuse to answer questions on variables that may be sensitive such as on sexuality and income.

Due to improvement in technology such as computers and mobile telecommunication, nowadays, it is possible for researchers to carry out telephone interview surveys. This is a semi-personal survey research technique (Frankfort-Nachmias and Nachmias, 1996:242; Babbie, 2013; Bernard, 2006). The logic behind the use of telephone interviews lies in the assumption that researchers can reach a wide population. Unlike in the 1950s, 1960s and 1980s, today mobile telephony has enabled many people to be connected to a telecommunication network. There are a number of computer programmes that allow random-digit dialing (RDD) and computer-assisted telephone interviewing (CATI), to be executed, although this telephone interview is not suitable for open-ended questions. Its strength is that researchers present at the survey centre can supervise the interviewers and is ideal for simple survey instruments. There are however reported cases of non-response, usually described as ‘broken off’ interviews.

Apart from telephone interviewing, the advancement in information communication technology permits researchers to conduct online survey interviewing vide the internet-based social media. According to Babbie (2013), online or internet interviews can be conducted through the internet network in form of social media, for example, *Facebook*, *Google*, *Yahoo* and *Skype* chats through text messaging. One example of this can be a case in which a

researcher joining a virtual community of interest such as the County Development Association on *Facebook*. The researcher once accepted in the 'virtual community' can access information and receive up-dates on various topics, whenever a member posts a story or a comment on the issue under discussion. She or he can also take part in the chats and discussions by posting queries to elicit reactions and opinions from members of that social media community. Another example can involve a researcher sending out a questionnaire via email communication system. The recipients of the email will respond on the questionnaire and email back to the original sender (researcher). Online interviewing affords greater anonymity to the respondents and may be cheap and convenient for a researcher to reach-out a population that is computer literate. However, this excludes possible informants who are computer illiterate or those who live in areas that lack telecommunication and internet networks.

Comparison of Questionnaire and Interview Surveys

But one may ask if there are any differences between questionnaire and interview surveys. In this paper, we have already seen that survey research involves the use of questionnaire. This can be group questionnaire, mail questionnaire, or privately-filled questionnaire (self-administered). Survey research also involve the use of interview which may have various components such as highly and loosely structured interview, open- and closed-ended interview, face-to-face interview and telephone or internet-based interviews. The highly structured interview may sometimes be confused with questionnaire. However, the difference between interview and questionnaire firstly relates to the filling out of the instruments. In the interview survey, the interview schedule (guide) is filled by the researcher or his/ her trained assistants. In questionnaire survey, the instrument is filled by the respondent. Secondly, the interview generates data by asking people to express themselves in their own words, while the questionnaire has categories of words to which the respondent must react. Thirdly, the interview takes the form of conversation between two or more people, the researcher and respondent(s). The conversation may be formal, as well as informal, like in the day-to-day conversation or the recount of the prolonged experience of a certain situation under study. By being 'informal' does not, however, mean the interview is haphazard. It uses note-books, journals, voice

recorders and videos, among other technical aids to capture data in the field. Here, informal interview also means that the interview varies from audience to audience.

Survey Instrument Construction

Although questionnaires and interview schedules collect different types of data, both instruments must have certain key aspects. According to Bernard (2006), some basic aspects of survey instruments include first the definition of the problem under study. The research instrument should relate to the research problem. That is, what is the main question and what are the variables that can help construct the instrument, for example, to generate categories that cover the possible values and this may be done in several questions. Secondly, the listing of the items in the instrument should be appropriate to the research problem. The items listed should be simple, clear and unambiguous. They should be short and easy to follow. Thirdly, the researcher should avoid negative, biased and misleading items, as well as, the 'double-barrel' items, since they can have more answers that may be true. Fourthly, avoid hypothetical items, for instance, 'suppose A and B happens, how would you react?' Finally, items that are personalised and embarrassing should not be included in the instruments.

Furthermore, the design of the research instruments should have three components: introductory, main body and closing sections. The introductory section of the instrument provides what may be referred to as 'self-introduction' of the researcher and the purpose of the study. Besides, it makes a statement of persuasion and guarantees anonymity to the research subjects. It should also provide guidelines on how the instrument should be filled-in and returned. It requests informed consent and suggests the duration the meeting (interview) would take. The main body of the instrument contains the central items of the study. This could determine the time to be spent and relates to the scope and objectives of the study. Finally, the closing section contains a statement of gratitude and reminds the respondent/informant, on how to get back the research instrument. Further, the instrument may have filter items that eliminate the subject as required and general items (questions), which allow the respondent to get acquainted to the research situation. The instrument, should have specific items that make follow-up, to the general questions as well as biographical items, that aim at capturing personal details such as date of birth and age among others. The matrix items are the combination of items with same set of answers to save space and facilitate the flow of ideas. The

instrument can have free answer items (also referred to as open-ended responses). We also have multiple-type items, and these are closed-ended questions, with several options listed as responses and the dichotomous items that have only two possible responses. The factual items are those questions that measure the knowledge of the respondents on certain things (these may not be applicable in research). Lastly, are the opinion items that elicit people's opinions on a particular subject. These are extensive and can have many dimensions.

Strengths and Weaknesses of Survey Instruments

There are a number of strengths associated with the use of survey instruments. One is that some instruments such as the interview schedule can afford a researcher an opportunity of creating familiarity and building rapport with the study subjects. This leads to high response rates due to the researcher-informant familiarity. Thus, a researcher can make clarifications on some items. The other strength is that the researcher can also prompt the respondent and it is possible for connections to be made between different parts of the interview. Also, most of the survey research instruments allow the researcher to refine the items (questions) in the field while data collection is in progress.

Despite these strengths, there are some problems or weaknesses associated with survey research. One weakness relates to the reliability of some survey instruments such as the interview schedule. Because interviews are not standardized to produce reliable data the researcher needs to be highly competent. The second weakness is that survey research is very expensive and time consuming, for example, for collecting the data and transcribing them, and this means the researcher meets extra costs. Third, even if interviews can allow the researcher to do selective transcription, the field assistant who was in the field, would not be able to do this, since she/he may not be able to make connections between the data. Fourth, survey research, for example, the interview is prone to interruptions and even if it can be repeated, it would not yield same responses as the initial one. Fifth, some survey research that involves face-to-face encounters with subjects cannot guarantee anonymity, especially if the variables being considered are sensitive to the subject. The presence of a researcher may lead to the interviewer-effect, in which the interviewer may influence the data to be collected.

Conclusion

The objective of this paper was to examine the concept of survey research in the social sciences. It has been shown that survey research, a unique technique to the social sciences, involves the use of questionnaire and interview instruments in gathering data from the study sites. There are loosely structured, highly structured, open-ended and closed-ended questionnaires that aim at collection of quantitative data. However, personal interviews, ranging from schedule-structured, informal, unstructured, to telephone interviews are also used in conducting survey research. There are several strengths and weaknesses associated with each technique; however, given improvements and refinement in the method, social scientists should conduct survey research regardless of cost. There are general principles and guidelines on how survey research should be conducted and on how survey research instruments should be constructed; however, the best way for researcher to perfect one-self is by practice.

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