

METHODS OF DATA COLLECTION : QUESTIONNAIRE AND SCHEDULE

*K. D. Gangrade**

Introduction

ANALYSIS BASED on social science research methods has revolutionised the legal system. In recent times social advocacy and activist role of the courts have made it possible to bring into existence public interest litigation system. This has evolved justice to reach the poor and weaker sections of the society. The effective and efficient administration of justice will require a penetrating study of social phenomena using research tools and techniques.

The heart of any research design is the collection of data. There are two sources of collecting data—the primary and the secondary. In the first, the data is directly collected from the respondent, whereas in the second the main source is published and unpublished material. This is often called library research as well. Most of the studies have found these sources very beneficial. Several devices are employed to collect primary data. In this paper we shall confine our discussion to mainly two tools and techniques: Questionnaire and schedule. The specific preparation, construction and use of these tools will largely depend on aim, nature, scope and contour of the study

Definitions

Questionnaires and schedules are designed to collect data from a group of people coming under the purview of the study. The questionnaire is designed to collect data from large, diverse and widely scattered groups of people. Thus, it is a device for securing answers to questions by using a form which the respondent himself fills in. This is usually mailed to the respondents or is administered to a group of people at the same time by giving them appropriate forms and collecting them later.

The schedule is referred to as a form filled in during a personal interview in which both the interviewer as well as the respondent are

* Head, Department of Social Work (Delhi School of Social Work), University of Delhi, Delhi.

present. It contains a set of questions which are asked and then the columns are filled in by an interviewer in a face to face situation.

The two forms have much in common, particularly the fact that in both the cases the wordings of the questions are the same for all the respondents. However, at the same time there are important differences between the two methods. One distinction is based upon the predominant method of collection of data. The questionnaire is usually mailed to the respondents whereas the schedule is referred to as a form filled in during a personal interview. The impersonal nature of questionnaire necessitates standardised wordings to ensure uniformity. It is much more rigid and less flexible than the schedule. Both the methods have their own advantages and disadvantages.

Advantages

Questionnaire

The questionnaire is likely to be a less expensive procedure than the interview as it is simply mailed to the respondents with a minimum of explanation. Further, the questionnaire can often be sent to a large number of individuals simultaneously; an interview, on the other hand, usually calls for questioning each individual separately. With a given amount of funds, it is usually possible to cover a wider area and obtain information from more people by means of questionnaires than by personally interviewing each respondent.

The impersonal nature of a questionnaire—its standardised wording, its standardised order of questions, its standardised instructions for recording responses—ensures some uniformity from one measurement situation to another. Another advantage of the same is that respondents may have greater confidence because of their anonymity, and thus feel more free to express views which they fear might be disapproved of or might land them into trouble. Sometimes, the questionnaire places less pressure on the subject for immediate response. When the subject is given ample time for filling in the questionnaire, he can consider each point carefully.

Schedule

The questionnaire requiring extended written responses can be used with only a very small percentage of the population as even many college graduates have little facility for writing, and of those who do, few have the patience or motivation to write as fully as they might speak. On the other hand, the schedule can be used with almost all segments of the population. Surveys conducted through personal interviews have an additional advantage over surveys conducted through mailed questionnaires

in that they usually yield a much better sample of the general population and many people are willing and able to cooperate in a study where all they have to do is to talk. The proportion of returns in questionnaires is usually low, varying from about 10 to 50 per cent. Another advantage of the schedule is its greater flexibility. In a questionnaire, if the subject misinterprets a question or records his responses in a baffling manner, there is usually little that can be done to remedy the situation, whereas in the schedule, there is possibility of repeating or rephrasing questions to make sure that they are understood.

In addition, the interviewer is in a position to appraise validity of reports. He is in a position to observe not only what the respondent says but also how he says it. Interview is a more appropriate technique for revealing information about complex, emotionally laden subjects or for probing the sentiments that may underlie an expressed opinion. In the interview situation, the "social atmosphere" can be varied in other ways. Behaviour in real life occurs in situations that are seldom free from social pressures. The interviewer can, for example, point out objections to the position taken by the person being interviewed, and observe how the latter responds. This flexibility has advantage, especially if the ultimate objective of the measurement is to predict behaviour in varied situations.

Choice of Instrument of Data Collection

The choice of a particular instrument of data collection will depend on the characteristics of the respondents as well as the field situation. Of course, the constraints of resources—trained personnel, funds and time—will continue to operate all along. In fact, every item in a questionnaire or a schedule constitutes a hypothesis or a part of a hypothesis in itself. It is, therefore, essential to decide which data is and which is not relevant. This judgment requires critical thinking, guided largely by past study and theory. For example, in a study of social background and social values of judges, one would not be required to consider the information about climate or atmosphere as relevant. The hypothesis of the study will suggest the type of data needed, and the framework of argument will indicate the form they shall be in. The most important task for us to reach our cherished goal is to develop an instrument which would yield reliable and accurate data and be economical as well.

Types of Schedules and Questionnaires

The vast variety of questionnaires and schedules can be classified on the basis of their structuring. Structured questionnaires are those in which there are definite, concrete and preordained questions. The form

of the questions may be either closed or open; the important point is that they are stated in advance, not constructed during the interview. They are used in a wide range of projects, both to initiate a formal inquiry and also to supplement and check data previously accumulated. The purpose of the inquiries may be to obtain social or economic information, to assess opinion on public issues or events, to study administrative policies and changes, and so on.

For some research problems, a still more flexible approach than that provided by a standardised interview with open-ended question is appropriate. Such interviews take various forms and are under various names such as the "focused" interview, the "clinical" interview, the "depth" interview and the "non-directive" interview. They are commonly used for a more intensive study of perceptions, attitudes and motivations, etc. than a standardised interview. The flexibility of the unstructured or partially structured interview, if properly used, helps bring out the effective and value-laden aspects of the subjects and responses, and determine the personal significance of their attitudes. Ordinarily, no schedule is used for this purpose. In other words, the non-structured interview is an open situation in contrast to the standardised structured interview. This does not mean that an unstandardised interview is casual. It should be carefully planned as the standardised one. However, it is recognised that many research problems may, and often do, require a compromise type of interview in which the interviewer is permitted leeway to use alternate questions that he considers appropriate in respect of particular respondents and particular question.¹

Essentials of a Good Instrument of Data Collection

The ingredients of a good questionnaire and schedule are: (a) Clarity, (b) brevity, (c) unambiguity, (d) reliability, and (e) communicability. Direct questions should be avoided as far as possible. The language should be simple and easy to grasp. Too many ideas should not be put into one question. The best and correct information can be elicited by having one idea in one question. The sequence of the question should be logical and to the point. There should be adequate checks and balances in the question to ensure reliability and validity of the responses. The annoying questions must be avoided at all cost. The researcher and his sponsoring organisation should be able to win the confidence of the respondents by establishing a good rapport credibility and communicability with them.

1. Fred N. Kerlinger, *Foundations of Behavioral Research* 481 (Surjeet Publication, Delhi, 1973).

The answers to questions are attitudinal and opinions are situational. They do not reflect values directly. An opinion may run counter to what a person is predisposed to believe because of pressures in the immediate situation. An opinion is often the complex resultant of many attitudes. For example, a large majority of the respondents were in favour of capital punishment when a survey was conducted immediately after the murder of Chopra children in Delhi. This was contrary to the opinion of a majority which was earlier in favour of abolition of the capital punishment. Similarly, attitudes derived from the value of personal integrity may call for rejection of wire tapping. But a belief that the community is in danger may bring other attitudes into play. The resultant opinion may accept wire tapping with some reservations. Where opinions reflect situational pressures, they may be held weakly as in the case of legislators or leaders who respond to group threats or to shifting climates of opinion. The legal system must safeguard itself from such pressures.

It must be remembered that public opinion is relatively unstable and fluctuates with changing situations. For instance, "Do you approve or disapprove the way some one is handling his/her job as prime minister?" This type of question tends to reflect immediate pressure. Despite its instability, public opinion develops within a social setting. The more the setting is understood, the less arbitrary the shifts in opinion appear. Though, opinion emerges from day to day interaction, people have social background and group affiliation; they are not separate items moving about at random. In any study, knowledge of the group structure of society is indispensable to proper understanding of public opinion. Opinions are affected by social experience, and the interaction of groups, varying in strength and activity, determines the weight and direction of public sentiments.

Studies on prediction of election returns have been considered an important achievement of modern social science. The polls have helped demonstrate that the behaviour of a large population can be studied through the sophisticated use of sampling techniques. This method and technique can be gainfully employed to ascertain as to how a small nationwide sample can accurately reflect certain characteristics of the population as a whole. The implicit assumption here is that each respondent understood the question and answered it precisely from the same point of view as that of the person conducting the study. It is, therefore, very essential that words and concepts involved in the questions should be very clear and explicit. Questions having double meaning and a variety of interpretations must be avoided.

Process of Construction of Questionnaire

The entire process of construction of questionnaire can be divided

into the following six steps: (a) Deciding what information should be sought, (b) deciding what type of questionnaire should be used-structured or unstructured, (c) writing the first draft, (d) re-examining and revising questions, (e) pretesting, and (f) editing the questionnaire and specifying procedures for its use.²

Question Content

In both questionnaire and interview schedule information is obtained by asking questions. Questioning is particularly suited to obtaining information about what a person knows or expects, feels or wants, intends or does or has done, and about his explanations of reasons for any of these. These major types of question content are discussed below. It is essential to remember, however, that questions do not always fall really into one or the other content type. The distinction among types are a matter of custom and convenience.

Content aimed mainly at ascertaining facts

Often the simplest and most economical method of obtaining facts is to go directly to the people who are in a position to know them and to ask for the desired information. It is reasonable to assume that people who have access to information, who are sufficiently intelligent to absorb it and who are motivated to acquire and retain it, are able, if they are willing, to provide the investigator with reports of many interesting and valuable facts. We may expect, for example, that the people who are responsible for the execution of a policy know what it is. Questions about the person's age, education, religion, income, nationality, marital status, occupation etc. are of this type.

Content aimed mainly at ascertaining beliefs about what the facts are

Instead of asking questions to find out the objective facts from people, the investigator may wish to learn what people believe to be the facts, for example, in asking a respondent to indicate whether the following statement is true or false: Child marriages are taking place in spite of the Child Marriage Restraint Act 1929. Here the respondent's answer is not used to establish what is objectively true but rather to provide a picture of his beliefs.

2. Claire Selltiz, Marie Jahoda, Morton Deutsch, Stuart W. Cook, *Research Methods in Social Relations* 347 (Revised one-volume ed. Holt, Rinehart and Winston, New York, 1964).

Content aimed mainly at ascertaining feelings

A person's belief about what the facts are, will often give clear indication of his feelings and desires. In questionnaires and schedules, perhaps the most common method of investigating feelings is to include items that bear directly on various possible emotional reactions like fear, distrust, disgust, contempt, hate, envy, sympathy, admiration etc.

Content aimed mainly at discovering standards of action

An individual's definitions of appropriate behaviour in various social situations are of interest both as a reflection of the prevailing climate of opinion and as a basis for predicting his probable behaviour in such situation. Definitions of appropriate action frequently have two components—ethical standards of what should be done, and practical considerations of what it is feasible to do. Questions may be directed towards either of these issues.

Content aimed mainly at present or past behaviour

The present or past behaviour of any person is a type of fact that he himself is in a uniquely favourable position to observe. How a person has behaved in the past in a certain type of situation is, in the absence of contradictory evidence, an indication of what his future behaviour will be in a similar situation.

Content aimed mainly at conscious reasons for beliefs, feelings, policies or behaviour

Finally, the question may be aimed at obtaining the reasons the respondent is able to offer for his beliefs, feelings, policies or behaviour. In this, the investigator is interested in finding out "why".

Question Sequence

Developing a questionnaire is moving from the "inside" outward; what is meant by this is that the researcher should first lay out tentatively the logical implications of his problem and then draw upon his own experience and the literature for questions which are relevant to those logical implications. At this stage the researcher may consult his colleagues and others to get their mind. This would enable him to have a list of areas to be covered and perhaps some rough formulations of some of the areas. This total process is one of obtaining an even larger number of questions and of progressively uncovering omissions, biases and

ambiguities.³ The draft questionnaire—whether highly structured or unstructured—must be pretested.

Reported facts must always be evaluated in terms of credibility. The rules of evidence that have developed through the centuries in judicial procedure are a good source of insight into factors affecting credibility. It is always pertinent to raise such questions as: "How did the respondent obtain knowledge of the 'fact'—through direct observation, through inference, through hearsay, etc.? What motives may the respondent have in reporting the 'fact'? How accurate is the respondent's memory of the 'fact' likely to be?"⁴

Interview Schedule

Interviewing itself is an art, but the planning and writing of an interview schedule is all the more so. It is difficult to produce a good schedule without considerable prior study and practice. There are several reasons for this, the main one probably being the multiple meaning and ambiguity of words, the lack of sharp and constant focus on the problems and hypotheses being studied, a lack of appreciation of the schedules as a measurement instrument, and a lack of necessary background and experience.

The purpose of a schedule is to provide a standardised tool for observation or for interview in order to attain objectivity. By schedule every informant has to reply the same question put in the same language and the researcher has no choice to get the desired reply by putting a different question or changing the language of the same question. The order of the questions is also the same and thus the whole interview takes place under standardised conditions and the data received is easily comparable. The other purpose of the schedule is to facilitate the work of tabulation and analysis. In fact, the questions are formed while keeping the tabulation plan in mind.

Procedure for Framing a Schedule

While framing a schedule, the first question to be asked is, what are the different aspects of the problem? The problem under study should first of all be split up into various aspects. The determination of these aspects will depend upon clear understanding of the problem under study. The next question to be decided is, what information is necessary? For this purpose each aspect has again to be broken up into

3. William J. Goode and Paul K. Hatt, *Method in Social Research* 135-36 (international student ed. McGraw-Hill Book Co., Inc., New York, 1952).

4. *Supra* note 2 at 244.

a number of subparts. These subparts should be exhaustive enough to give a full and complete picture of the aspect under study. The third step is the framing of actual questions. This part deals with the form and wordings of the questions. More than one question may be asked to get complete information about the particular aspect. When information cannot be secured through direct questions, indirect questions may be resorted to. This part is the most vital part of the schedule and any error in it may invalidate the whole enquiry through biased, incorrect, incomplete or irrelevant information. The fourth step is general layout of the schedule and arrangement of questions. Once the questions have been given definite form, the next problem is to bring them in proper form. The last step is testing the reliability and validity of schedule. After the schedule has been prepared, it has to be tested on a sample population to find out if any discrepancies have crept in. Ultimately it may be amended in the light of the experience thus gained.

Contents of Schedule

The whole schedule may be divided into three parts according to the nature of contents: (1) Introductory part, (2) main schedule, and (3) instructions to the interviewer or observers.

(1) *Introductory part*—This part contains introductory information about the schedule, investigation and respondent. It is more or less common to all the schedules and is called an identification data which deals with general information about the interviewee, e.g., his name, address, age, sex, post held, education etc.

(2) *Main schedule*—After the preliminary part comes the main portion of the schedule. It is the most vital part and has to be prepared with great care. The schedule consists of questions as well as blank tables where information to be supplied by the interviewee has to be filled in.

(3) *Instructions to interviewers*—The schedule generally contains exhaustive instructions for the interviewers. Although they are personally explained and even practically trained in the work, still instructions in writing are necessary.

Type of Questions

The type of questions to be put in the schedule is the same as that of the questionnaire except the fact that the frequency of open-ended questions may be increased. However, no hard and fast rule can be laid down for selection of the nature of questions to be asked. It all depends upon the individual nature of study—type of respondents, quality of field workers and other means of verifying the information.

The questions should be few, short, clearly worded, simple and easy to reply. They should be within the information scope of the respondent. While framing the questions, tabulation plan should be kept in mind. At places, indirect questions may be asked to get a correct reply. Interrelated questions may be asked to act as cross-checks. When questions seeking the degree of intensity of feelings or convictions are asked, questions beginning with why, what, when and how should also be included; but they must be properly rated or ranked to avoid confusion in later stages.

While framing questions for the interview schedule too, long, complex, personal, suspicious and leading question or questions should be avoided. Moreover, there should not be any embarrassing question or questions that are likely to yield inaccurate response.

Conclusions

The heart of any research design is collecting data. There are two sources of collecting data—the primary and secondary. The primary data is collected mainly through questionnaire and interview schedule. The questionnaire is designed to collect data from large, diverse and widely scattered groups of people. This is usually mailed to the respondents or is administered to a group of people at the same time by giving them appropriate forms and collecting them later. The schedule is referred to as a form filled in during a personal interview in which interviewer as well as the respondent both are present and it contains a set of questions which are asked and filled in by an interviewer in a face to face situation. The two forms have much in common, particularly the fact that in both the cases, the wording of the questions is the same for all the respondents. However, at the same time there are important differences between the two methods. In nutshell, both have their own advantages as well as disadvantages.

The choice of a particular instrument of data collection will depend on the characteristics of the respondents as well as the field situation. Both of these can be classified on the basis of their degree of structuring: structured having fixed alternatives of replies; and unstructured having open-ended question. The essentials of a good questionnaire and schedule are clarity, brevity, unambiguity, reliability and communicability.

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