

Each of the above tools is used for specific method of data gathering: Observation schedule for observation method, interview schedule and interview guide for interviewing, questionnaire for mail survey.

Functions

The tools of data collection translate the research objectives into specific questions/items, the response to which will provide the data required to achieve the research objectives. In order to achieve this purpose, each question/item must convey to the respondent the idea or group of ideas required by the research objective research objects, and each item must obtain a response which can be analyzed for fulfilling the research objectives.

Information gathered through the tools provides descriptions of individuals, institutions or other phenomenon under study. The characteristics may help to explain differences in behavioral pattern and performance of objects under study.

Information gathered through the tools serve another purpose also. It is useful for measurement the various variables pertaining to the study. The variables and their interrelationships are analyzed for testing the hypothesis or for exploring the content areas set by the research objectives.

Questionnaire

Questionnaire depends upon research objectives. For each objective or research questions, list all the associated questions that a researcher wants to answer through study. Then the information required to answer them is listed, and finally, the questions are listed. A questionnaire consists of a set of questions presented to a respondent for answers. The questionnaire is used during structured surveys or interviews. The respondent read the questions, interpret what is expected, and then write down the answers themselves. It is also called an interview schedule when the researcher asks the questions and records the respondents reply on the interview schedule. Here, the researcher may have to explain questions to the respondents.

There are many options before the researchers adopt this method, but questionnaires should be developed and tested carefully before being administered on a large scale. There are three basic types of questionnaires, closed-ended open ended, and a combination of both.

1. Closed-ended questionnaire: closed-ended questionnaires generally include multiple choice questions or scale questions. This type of questionnaire can be administered to a large number of respondents or sample size. As there is set format, the data generated from questionnaire can be easily fed into a computer system for the purpose of analysis.
2. Open-ended questionnaire: open-ended questionnaires offer the flexibility to respondents to answer in their own words. It may leave a blank section to write an answer. Closed-end questionnaires might be used to find out how many people use metro rail service in New Delhi, but open-ended questionnaires might be used to find out what people think about the quality of service.
3. Combined questionnaire: in this method, it is possible to find out how many people use a service and what they think of the service in the same form. The combined questionnaire

may begin with a series of closed-end questions, with boxes to tick or scales to rank, and then finish with a section of open-ended questions or a more detailed response.

Observation schedule or Observationnaire

This is form on which each unit observation for observations of an object or a phenomenon is recorded. This item to be observed is determined with reference to the nature and objectives of the study. They are grouped into appropriate categories and listed in the schedule in the order in which the observer would observe them.

The items are structured with possible alternatives. Space is each unit observation for encircling or checking, or recording, as the case may be.

Provision is made for the correct identifications of each case observed and of the observer.

The schedule should be so constructed as to make it possible to record the observations easily and correctly and to tabulate and analysis effectively.

The schedule must be as devised as to provide the required verifiable and quantifiable data and to avoid selective bias and misinterpretations of observed items. The units of observation must be simple, and meticulously worded so as to facilitate precise and uniform recording.

Interview Guide

This is used for non-directive and depth interviews. It does not contain a complete list of it on which information has to be elicited from a respondent; it just contains only the broad topics or areas to be covered in the interview.

Interview guide serves as a suggestive reference or promoter during interview. It aids in focusing attention on salient points relating to the study and in securing comparable data in different interviews by the same or different interviewers.

There is considerable flexibility as to the manner, and order language in which the interviewer asks the questions. If the interviewer has to refer the guide very often, it would defeat its own purpose. The interviewer cannot listen closely and analytically if his attention rests on the guide. He may fail to respond to the cues and implications of the interviewee's remarks.

Interview schedule and mailed Questionnaire

Both these tools are widely used in surveys. Both are complete lists of questions on which information is elicited from the respondent's. The basic difference between them lies in recording responses. While a schedule is filled out by the interviewer, a questionnaire is completed by the respondent.