METHODS OF DATA COLLECTION IN LEGAL RESEARCH

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INTRODUCTION

The Term “Data Collection” consist of the word “Data”, which means “information” and the word “collection”, which means gathering. Data collection is a process to gather information related to the relevant subject area to address it for the critical evaluation of the question. It enables the researcher to answer the research questions, evaluating the hypothesis and the result. It is one of the essential steps of the research, which is common to all the fields of the study. The approach for the data collection may be different for the different areas of the study. It depends on the information required for the researcher. Proper data collection demands planning, hard work, reasoning, patience, preservation, etc.

Data Collection may be defined as the process of collection, measurement and analysis of the accurate insight for any research using standard validated techniques.

This paper is targeted to understand the concept of Data collection. The author has explained various methods and techniques of the data collection by taking suitable examples where needed.

TYPES OF DATA

Data, as stated earlier, means “information”. It has been broadly classified into the following types;

Based on the source

Primary Data- the data which has been collected by the researcher from the data source. It is directly collected from the original source, for example- Data collected by the Government organisation, research-based private institutions, data collected by the Investigator on the field, Academic Researchers for their study.

Secondary Data- Those data which were primary data at one point in time, but it becomes secondary when used by another person than the person who has collected those data. In other words, the data has been collected by someone else but used by others for their purposes. For example, when one researcher refers to the previous work of others in the relevant field for their study or analysis.

Based on the Nature

Quantitative Data- Quantitative data is numeric and can be computed mathematically. It can be summarised easily through a table, graphs, maps, etc. It produces results that are easy to compare and generalise.

Quantitative Data- Mostly it is non-numeric and generally descriptive in nature. Generally, the data collected aims to collect the feelings, emotions, or subjective answers to the targeted questions. Generally, the questions include “how” or “why”. The data only indicates the particular groups involved and cannot be generalised outside of the targeted groups.
METHODS OF DATA COLLECTION

Methods of Data collection is an approach of the researcher or any organisation by which they gather the information for their study or research. Though the researchers or any originations is free to adopt any methods which are easy and suitable for their study, there are a number of defined methods of data collection which includes-

- Observation Method
- Questionnaires Method
- Survey Method
- Interview Method
- Focus Group Discussion Method
- Case Study Method
- Experimental Method
- Sampling Method

OBSERVATION METHOD

In simple words, researchers or a group put their efforts to observe real-life situations under this method. This method is widely used in studies relating to behavioural sciences. This method is not considered as a scientific observation because it is not collected with the help of any scientific tool. The validity and reliability may differ from person to person. The advantage of this method is that there is less chance of subjective biases if it is done accurately under this method. The second advantage of this method is that it relates to the things which are currently happening; it is not based on any past behaviour or future intention. The third advantage of this method is that it is independent of the respondents. However, this method has certain limitations, like, under this method, the information may be very limited, and at the time of observation, certain unforeseen factors may interfere and affect the result.

Major Advantages of this Method

- Strong reliability
- A researcher is free to observe bias
- Less Expensive
- A large sample can be collected

Major Disadvantages of this Method

- Much of the interaction is absent.
- Fresh insights are difficult to be gathered.

QUESTIONNAIRES METHOD

This method was developed by Sir Francis Galton. Under this method, the researcher sets a series of questions and other prompts to gather the information from the respondent. It consists of a number of questions that may be open-ended or closed-ended. In open-ended questions, the respondent needs to answer the question in his/her way, whereas in closed-ended questions respondent has to choose an answer from a given set of options.

In the questionnaire, the questions should flow logically from one to the next. If any sensitive information like income, sexual activities, use of drugs, etc., are targeted to be gathered from the respondent, then it must be put at the end of the questionnaire to establish trust. A double-barrelled question should not be asked by the researcher. An example of a Double-Barrelled question is- How do you like or dislike ……?

Some Important Considerations which need to be in a good questionnaire

- **Purpose**- There should be a purpose for every question in the questionnaire.
- **Objective**- There must be some specific questions that are necessary to test the hypothesis and may explore the area defined by the objectives.
Use of Words- The word used in the questionnaire should be a defined and qualified term that may be easily understood. All the possibilities of misinterpretation should be avoided to the maximum possible extent.

Design- the questionnaire must be designed in a way that will give a complete response.

Leading Questions- It must be objective, and no leading questions should be asked in the questionnaire.

Reliability and Validation- It is important for the researcher to rely on a valid source, and the answer must be validated using some tool of measurement.

Major Advantages of this Method

- Can be posted, e-mailed or faxed
- Can cover a large number of people and organisation
- Wide Geographical Coverage
- No Prior Arrangements are needed
- No interviewer bias
- Avoid the embarrassment of the respondent
- Relatively Cheap

Major Disadvantages of this Method

- It cannot be used with illiterates and Children.
- Time Delay Process for the response.
- Generally, it does not motivate the respondent to answer the questions.
- Sometimes no response from the respondent
- No control over who completes the questionnaire
- Sometimes respondent does not complete the questionnaire

Some important sign remains unaddressed, like emotion, gesture, reaction, assertion, motions etc.

SURVEY METHOD

Under this method, the researcher records thoughts, opinions and feelings, etc., with the required information. For the general understanding, we can look into the surveys done by various organisations these days. Organisation sends forms of a survey through e-mail or SMS to understand the behaviour of the customer towards their services. These online surveys are done for extracting information about significant business matters.

Generally, psychologists and sociologists use this method to analyse the behaviours of the respondents. In this method, questions are predetermined by the researcher like a questionnaire. The researcher compares the attitudes of the different respondents, and one can also analyse the behavioural change of the respondent with time. A repeated survey can serve this objective. A survey can be done by using electronic means, telephone, mobile or direct interaction with the respondent.

In the survey method, a designed and validated instrument of survey should be used to ensure the accuracy of collected data. Like questionnaires, in this method, questions may be open or close-ended, but in this method, the researcher should use open-ended questions as far as possible. A pilot study must be done by the researcher before applying it to the large population. For example, the researcher may use this method for small groups and may analyse that the method is working on archiving his/her objectives.
Some Important Considerations need to be in a good ‘survey method’.

- **Planning** - The Researcher must outline the plan the whole process of data collection through this method at the beginning.
- **Design** - The Researcher must design a methodology and sample collection method.
- **Testing** - Pilot testing should be done at the beginning.
- **Analysis** - Analysis of Pilot testing should be done to reveal various problems.

Major Advantages of this method

- It is cheaper as compared to other methods
- Behaviour, feelings and opinions can be gathered.
- A large number of populations can be targeted.
- Versatile collection of the response.

Major Disadvantages of this Method

- The process involved under the method are complex
- Sensitive information is difficult to be gathered.

INTerview METHOD

It is one of the methods to gather detailed information from the respondent. In this method, researchers generally interact with respondents face to face. Sometimes interviews may be done through Telephone, Mobile, or in other electronic forms. Face to Face interaction has its own advantages, like which is not in the plan sheet can be asked to the interviewee. If there is any misconception to the respondent, it can be solved in real-time. Telephone or other electronic forms of the interview is advantageous as it is cheaper and can be done rapidly than face to face interview. An interview is an engagement of researcher and respondent in a direct form. Interviewing an individual or a group of individuals involves asking the question and getting the answer immediately.

Types of Interviews

There are various types of interviews. Some Important types of interviews are as follow:

- Structured Interview
- Semi-Structured Interview
- Unstructured Interview

Structured Interview

Structured interviews are those forms of the interview that involve the use of a set of predetermined questions. In this method, the researcher asks the same series of questions to every participant. There are less open-ended questions in the structured interview to avoid much variations in responses. The role of the interviewer is neutral and does not put his/her opinion in the responses. This method should be used on the literate participant so that they can understand the question and relevant topic of the study.

Semi-Structured Interview

Semi-Structured interviews are those interviews where an “interview guide” is used. A list of questions arranged in a particular manner is set to be asked to the interviewee. According to Bernard, this interview is very useful when the researcher gets only one chance to interview someone. Generally, under this method, open-ended questions are set to be asked to the interviewee. While conducting an interview under this method, the researcher should record the interview because it would be a little difficult for the researcher to jot down
every response of the interviewee and conduct the interview smoothly. Later, the researcher may jot down the responses with the help of recorded audio or audio-video interview.

**Unstructured Interview**

Under this method, there is no structured interview guide. A researcher should have a clear plan in his/her mind to focus on the goal of the interview. The whole interview is guided by the plan of the researcher. Under this method, the nature of questions is again open-ended, and the interviewee expresses his/her views on the topics. The researcher should again record the interview because the nature of the questions is open-ended, and it would be difficult to jot down the response of the interviewee.

**Major Advantages of this method**

- There is always a possibility to re-structure the question as per the need of the researcher.
- More information can be gathered in-depth.
- Personal information can be easily obtained.
- Control over the person who is responding; generally, it is not in the case of a questionnaire, survey and other methods of data collection.
- There is generally a low chance of non-response.
- Misinterpretation and misunderstanding are very low in the interview process.
- An interviewer can make it clear when the interviewee needs some examples to understand the question.
- Chance of getting new insights for the interviewer.

**Major Disadvantages of this Method**

- It is an expensive method.
- Some irrelevant information may be obtained from the interviewee, which is not as per the goal of the interview.
- There is a chance of some systematic errors in a real-time interview.
- There is a chance of biases of the interviewer as well as interviewee, which may affect the validity of the result.
- This is a time-consuming method and can be done with a limited number of individuals.
- Sometimes, important officials, higher executives, high-income group people are not easily approachable, and to that extent, the data may prove inadequate.

**Focus Group Interview Method**

In this method, a small group, generally six to seven people, discusses a study agenda topic. Some moderator usually moderates this discussion. In this method, the participants disclose their views, opinions, reasons, etc., on a topic, which is recorded by the researcher for their study.

This method was evolved with the work of Merton and Fiske in the 1940s, who were using this method to record consumer satisfaction. In this method, some general questions are asked to a group, which is supposed to be answered by each participant.

**Some Important Considerations need to be in a ‘focus-group’ method.**

- **General and Standard Questions**- The questions for the discussion should be general which can be understood by each participant, and it should also be in a standard form so that the objective of the discussion may be fulfilled and the
A researcher may draw some relevant data from the group discussion method.

- **Number of Participants** - There should be a small number of participants for each group so that the discussion may go smoothly and each participant can get adequate time to respond to the question.
- **Moderator** - The discussion should be facilitated by a trained moderator who can make coherence between all the individuals to the group.

**Major Advantages of this method**

- In-depth information on the concept.
- A knowledgeable and experienced individual can be targeted.
- A topic that is difficult to be observed can be discussed under this method.
- It can be used to examine the reason behind the different thinking among people.
- Do not require participants to be literate.

**Major Disadvantages of this method**

- Time Consuming
- Sometimes due to diverse and different opinions among the people, there is no final result.
- Difficult to arrange the meetings as each participant should be available at the decided time.

**CASE STUDY METHOD**

Under this method, a single person, group, community, etc., are targeted for a detailed study. This method was originated in the field of clinical medicine, where a number of patients used to be kept under observation and a detailed medicinal response was observed by the doctors. This method is still used in the field of medicine or drug trial. Nowadays, this method is widely used in other fields also like psychology, psychiatry, legal fields, etc.

**Types of Case Study**

- Prospective Case Study
- Retrospective Case Study
- Explanatory Case Study

**Prospective Case Study**

In this type of case study, an individual or a group is observed, and on the basis of observation, the researcher reaches the outcome. This method is generally used in the field of medical science, where an individual or a group is kept under observation for an outcome.

**Retrospective Case Study**

In this type of case study, the researcher looks into the historical data to reach the outcome. For example, if a researcher asks individuals to share the historical information and find out some root cause of the problem.

**Explanatory Case Study**

Under this method, the researcher analyses the data closely and draw a theory and later tests the theory on defined principles.

In legal fields case study method is slightly different from the other fields. In this field, a researcher refers to the different case laws on a single issue that has been already decided by the Courts. Once the researcher collects the cases they analyse in respect of the legal provisions of the respected jurisdiction. In the next step, generally, a researcher refers to finding out of lacuna. In the last step, the researcher analyses it with his objective and gives the results and suggestions.
Major Advantages of this Method

- Under this method, a researcher may find out some new helpful thing which may give a new theory to the researcher.
- This study method may increase the analytical skills of the researcher.
- This study method may deal with all the aspects of the social units.
- It is a practical based application.

Major Disadvantages of this Method

- Time taking and vague process
- There is no limitation of the study. A researcher finds it difficult to decide where to stop.
- Sometimes, it becomes difficult to compare the data of the different samples.

EXPERIMENTAL METHOD

This method is generally used in the field of science. Under this method, a researcher tries to find out the cause and effect relationship. There are two variables in any research; one is an independent variable, and the other is a dependent variable. The variable which the researcher manipulates is referred to as an independent variable, while the variable which changes due to the manipulation in the independent variable is known as the dependent variable. Here, in this case, “cause” is an independent variable and “effect” is its dependent variable.

Types of Experimental Method

- **Laboratory Experiments**- these experiments are generally done in the laboratory, which is done in a controlled environment. In this type, accurate measurements are possible. The outcome of this method is able to be replicated.
- **Field or Natural Experiments**- these experiments are the type of experiment in which the researcher examines what is the effect on the dependent variable as a result of manipulation in the independent in the context of the natural environment. In this type of study, even participants do not know that they are being studied, and due to this, it has higher ecological validity than a lab experiment.

Major Advantages of this Method

- **Specific Conclusion**- In this method, there is control over the variables which is specific and relevant to the study.
- **Duplication**- the result of the experimental method can be duplicated when the same variables and same process are repeated again.
- **Cause and Effect**- the experiment allows the researcher to determine various causes and effects.
- **Control over variables**- Researchers have control over the variable, and it can be used to gain different insights.

Major Disadvantages of this Method

- **Error**- In the experimental method, there is a high chance of human errors.
- **Replication**- Under this method, the result may apply in one situation and may not suit other situations.
- **Ethical and Practical Problems**- In the Experimental method, there may be a chance of facing ethical and practical problems.

SAMPLING METHODS

Sampling Methods of data collection is used when a researcher needs to collect information from a large population. Practically it is not possible to collect the data from each individual from the population and analyse the whole data at once. In this
method, the researcher collects the sample from the public and analyse it, considering it on the whole targeted population. There are various techniques of sampling methods by which researchers can get valid data from a large population. Some of the important techniques are as follows;

- Simple Random Sampling
- Systematic Sampling
- Stratified Sampling
- Clustered Sampling
- Snowball Sampling

**Simple Random Sampling**

In this method of sampling, the researcher chooses the individual from the population by chance. Each individual of the population has an equal chance of being selected. In other words, the probability of selection is the same for each individual from a group of the population. For example, in a group, there are 500 people, and 125 people are to be taken as a sample; in this case, the researcher writes the name or any code for each person and keep it into a box and randomly selects 125 names for sample. In general words, it can be termed as a lottery chance. One of the advantages under this method of collection is that it is a straight method for the collection of samples, and there is no chance of bias as the researcher himself/herself does not know who is going to be selected as a sample. One of the major disadvantages of this method is that there may be a chance of non-selection of the individual, which can be unmatched with the characteristic of interest.

**Systematic Random Sampling**

In this method, individuals are selected with a regular interval from a sampling frame. For example, a researcher needs 500 sample size from a population of 5000 people; then, he may select the sample on the basis of 5000/500= 50th number of the sampling frame. This method is more convenient than the simple random sampling method.

**Stratified Sampling**

In this method, the group or population is divided into various subgroups with similar characteristics. It is used to measure the interest between the different individuals of subgroups. For example, if there are a number of students consisting of male students and female students, then under this method, two groups consisting of one male group and another female group may be made to understand the views of male and female students. Equal representation is also a factor which should be kept in mind while making the groups. For example, in college, there are 500 students consisting of 300 male students and 200 female students. In this case, from each group, an equal number of representations is needed; for example, a researcher can make two groups consisting of 100 male students and 100 female students.

**Clustered Sampling**

In this sampling method, the population are divided into subgroups which is known as “clusters”. Subgroups of a population are used as a unit rather than individuals.

**Snowball Sampling**

In this method, the individual who is selected for the sample is asked to nominate further known subject to him/her, so the sample itself increase in size like a rolling snowball. This method is generally used in the field of social sciences to investigate a group that is hard to reach.
Conclusion

Data is one of the important requirements of any research; without data, a researcher cannot reach to any conclusion, and his research would never be completed. There are various methods and tools which is used by the researcher for the data collection. On the basis of the nature of the source, the data has been classified into two categories, namely primary data and secondary data. Primary data are the data that is collected by the researcher from the source itself, whereas the secondary data are the data which is not collected from the source but collected from the others work. The above discussion relates to the collection of primary data, which can be collected by different techniques like questionnaires, interviews, surveys, sampling, experiments, etc. The researcher should store all the data in a systematic form and must analyse it reach to some conclusion.

References

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