**QUALITATIVE DATA COLLECTION METHOD**

Qualitative Data collection method: ‭Qualitative data are mostly non-numerical and usually descriptive or nominal in nature. This means the data collected are often in the form of words and sentences. Qualitative approaches aim to address the ‘how’ and ‘why’ of a program and tend to use unstructured methods of data collection to fully explore the topic. Qualitative questions are open-ended.

Qualitative methods include focus groups, group discussions and interviews. Qualitative approaches are good for further exploring the effects and unintended consequences of a program. They are, however, expensive and time consuming to implement. Additionally the findings cannot be generalized to participants outside of the program and are only indicative of the group involved.

Qualitative data methods‬ can be ‭ ‬used to improve the quality of survey-based quantitative evaluations by helping generate evaluation hypothesis; strengthening the design of survey questionnaires and expanding or clarifying quantitative evaluation findings.

These methods are characterized by the following attributes:

- they tend to be open-ended and have less structured protocols

- they rely more heavily on ‭ ‬interactive interviews; respondents may be interviewed several times to follow up on a particular issue, clarify concepts or check the reliability of data.

- the use triangulation to increase ‭ ‬the credibility of ‬their findings (ie‬ researchers rely on multiple data collection methods to check the authenticity of their results)

The data collection ‬method‬ must observe ‬the ‬ethical principle‬ of‬ research. ‭ ‬

The qualitative methods most commonly used in evaluation can be classified in three broad categories‭:‬

1. IN-DEPTH INTERVIEW: In-depth interviews are a qualitative data collection method that involves direct, one-on-one engagement with individual participants. In-depth interviewing can take place face-to-face, or in some cases over the phone.

Advantage of In-depth interview includes:

1. Interviewers can establish rapport with participants to make them feel more comfortable, which can generate more insightful responses – especially regarding sensitive topics.

2. Interviewers have greater opportunity to ask follow-up questions, probe for additional information, and circle back to key questions later on in the interview to generate a rich understanding of attitudes, perceptions, motivations, etc.

3. Interviewers can monitor changes in tone and word choice to gain a deeper understanding. (Note, if the in-depth interview is face-to-face, researchers can also focus on body language.)

4. There is a higher quality of sampling compared to some other data collection methods.

5. Researchers need fewer participants to glean useful and relevant insights.

Disadvantages of in-depth interviews

1. In-depth interviews are quite time consuming, as interviews must be transcribed, organized, analyzed, and reported.

2. If the interviewer is not highly skilled and experienced, the entire process can be undermined.

3. The process can be relatively costly compared to other methods. (However, telephone in-depth interviews vs. in-person can significantly reduce the costs.)

4. Participants must be carefully chosen to avoid bias, and this can result in a longer vetting process.

5. Participants typically expect an incentive to participate, and this must be carefully selected to avoid bias.

2. OBSERVATION METHODS: Observation, as the name implies, is a way of collecting data through observing. Observation data collection method is classified as a participatory study, because the researcher has to immerse herself in the setting where her respondents are, while taking notes and/or recording.

Advantages of observation method

Advantages of observation data collection method include direct access to research phenomena, high levels of flexibility in terms of application and generating a permanent record of phenomena to be referred to later. At the same time, observation method is disadvantaged with longer time requirements, high levels of observer bias, and impact of observer on primary data, in a way that presence of observer may influence the behaviour of sample group elements.

3. DOCUMENT REVIEW: Document review is a systematic collection, documentation, analysis and interpretation, and organization of data as a data collection method in research. Document review results in information and insight into the research question and to the practice of teaching.

**QUANTITATIVE METHOD OF DATA COLLECTION**

Quantitative data collection methods rely on random sampling and structured data collection instruments that fit diverse experiences into predetermined response categories. They produce results that are easy to summarize, compare, and generalize.

‭Quantitative data is numerical in ‬nature and can be mathematically computed. ‬

Quantitative data measure uses different scales, which can be classified as nominal scale, ordinal scale, interval scale and ratio scale. Often (not always), such data includes measurements of something. Quantitative approaches address the ‘what’ of the program. They use a systematic standardized approach and employ methods such as surveys and ask questions. ‬

Typical quantitative data collection method include‭:‬

1. Experiments/clinical trials: Clinical study design is the formulation of trials and experiments, as well as observational studies in medical, clinical and other types of research (e.g., epidemiological) involving human beings. The goal of a clinical study is to assess the safety, efficacy, and / or the mechanism of action of an investigational medicinal product (IMP) or procedure, or new drug or device that is in development, but potentially not yet approved by a health authority (e.g Food and Drug Administration). It can also be to investigate a drug, device or procedure that has already been approved but is still in need of further investigation, typically with respect to long-term effects or cost-effectiveness.

2. Observing and recording well-defined events (e.g. counting the number of patients waiting in emergency at specified times of the day).

3. Obtaining relevant data from management information systems.

4. Administering surveys with closed-ended questions (e.g., face-to face and telephone interviews, questionnaires etc)

5. In quantitative research (survey research), interviews are more ‭ ‬structured than in Qualitative research. In a structured interview, the researcher asks a standard set of questions and nothing more. Face -to -face interviews have a distinct advantage of enabling the researcher to establish rapport with potential participants and therefore gain their cooperation.

7. Paper-pencil-questionnaires can ‭ ‬be sent ‬to a large number of people ‭ and saves the researcher time and money. People are more truthful while responding to the questionnaires regarding controversial issues in particular due to the fact that their responses are anonymous.