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**READ ABOUT DATA COLLECTION METHODS:**

At the end of your reading you should summarise the following in a maximum of 6-typed pages-

1. Quantitative data collection methods with relevant examples

2. Qualitative data collection methods with relevant examples

**1). QUANTITATIVE DATA COLECTION:**

 The 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 research is concerned with testing hypotheses derived from theory and/or being able to estimate the size of a phenomenon of interest.  Depending on the research question, participants may be randomly assigned to different treatments.  If this is not feasible, the researcher may collect data on participant and situational characteristics in order to statistically control for their influence on the dependent, or outcome, variable. If the intent is to generalize from the research participants to a larger population, the researcher will employ probability sampling to select participants.

 Typical quantitative data gathering strategies include:

* Experiments/clinical trials.
* Observing and recording well-defined events (e.g., counting the number of patients waiting in emergency at specified times of the day).
* Obtaining relevant data from management information systems.
* Administering surveys with closed-ended questions (e.g., face-to face and telephone interviews, questionnaires etc).

**2). QUALITATIVE DATA COLLECTION:**

 Qualitative data collection methods play an important role in impact evaluation by providing information useful to understand the processes behind observed results and assess changes in people’s perceptions of their well-being. Furthermore qualitative 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 (i.e., researchers may change the data collection strategy by adding, refining, or dropping techniques or informants)
* 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
* they use triangulation to increase the credibility of their findings (i.e., researchers rely on multiple data collection methods to check the authenticity of their results)
* generally their findings are not generalized to any specific population, rather each case study produces a single piece of evidence that can be used to seek general patterns among different studies of the same issue

Regardless of the kinds of data involved, data collection in a qualitative study takes a great deal of time. The researcher needs to record any potentially useful data thoroughly, accurately, and systematically, using field notes, sketches, audiotapes, photographs and other suitable means. The data collection methods must observe the ethical principles of research.

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

* in-depth interview
* observation methods
* document review

**DIFFERENCE BETWEEN QUANTITATIVE AND QUALITATIVE USING EXAMPLES**

In order to better understand these concepts, it's best to observe examples of particular datasets and how they can be defined. Observe which are qualitative and which quantitative data sets in the following examples are:

* The cats' have orange, brown, black, or white fur (qualitative).
* The boys have brown, black, blonde, and red hair (qualitative).
* There are four black cats and five orange cats (quantitative).
* The cake was 50 percent chocolate and 50 percent vanilla (quantitative).

Even when a particular feature or attribute of an object is qualitative, such as chocolate for the cake or black for the cats, the inclusion of a number in the data set makes it a quantitative one, though this interplay is important for the study of statistics as it provides categories for which mathematicians can then compare numerically.