

## Q → Differentiate between Qualitative Analysis and Quantitative Analysis :-

Ans - Qualitative and quantitative analysis are two fundamental methods of collecting and interpreting data in research. The methods can be used independently or concurrently since they all have the same objectives. They have some errors, and so using them concurrently can compensate for the errors each has and then produce quality results.

### ❖ What is quantitative Analysis?

Quantitative analysis is often associated with numerical analysis where data is collected, classified, and then computed for certain findings using a set of statistical methods. Data is chosen randomly in large samples and then analyzed. The advantage of quantitative analysis is the findings can be applied in a general population using research patterns developed in the sample. This is a short-coming of qualitative data analysis because of limited generalizations of feelings.

### ❖ What is qualitative Analysis?

Qualitative analysis is concerned with the analysis of data that cannot be quantified. This type of data is about the understanding and insights into the properties and attributes of objects (participants). Qualitative Analysis can get a deeper understanding of "why" a certain phenomenon occurs. The analysis can be used in conjunction with quantitative analysis or precede it.

## Differences between Qualitative & Quantitative Analysis :-

Key Terms	Qualitative Analysis	Quantitative Analysis
Definitions	Qualitative data analysis is based on classification of objects (participants) according to properties & attributes.	Quantitative data analysis is based on classification of data based on computable values.
Objectivity	Qualitative Data Analysis is subjective.	Quantitative Data Analysis is objective.

Key Terms	Qualitative Analysis	Quantitative Analysis
Data Collection	In Qualitative Data Analysis, the data is collected in small, unrepresentative samples in an unstructured way. Typical data collected include colour, race, religion, nationality, & many more.	In Quantitative Analysis on the other hand, data is collected in large representative samples that can generalize the entire population.
Research Methodology	Qualitative data analysis methodology is exploratory where the analysis seeks to get a deeper understanding of why a certain phenomenon occurs.	The methodology in quantitative analysis can be conclusive such as how much or how many times a certain phenomenon occurs not why it does occur.
Research findings	In qualitative analysis, research findings are specific to the objects being studied and are not applicable on the general population.	In quantitative analysis the findings can be applicable on the general population.
Method of data collection	In qualitative analysis, researchers often ask open-ended questions, conduct interviews, and observations.	In quantitative data analysis researchers take measurements, conduct surveys, experiments and observations.
Purpose	Qualitative analysis seeks to get a deeper understanding into social interactions.	Quantitative Analysis seeks to test hypotheses and even give future predictions.
Role of Researcher	Researcher & their biases may be known to participants in the study & participant characteristics may be known to the researcher.	Researcher & their biases are not known to participants in the study & participant characteristics are deliberately hidden from the researcher (double blind studies).
Final Report	Narrative Report with contentual description & direct questions from research participants.	Statistical report with correlations, comparisons of means & statistical significance of findings.
Nature of Observations	Study behaviour in a natural environment.	Study under controlled conditions; isolate causal effects.