Quantitative and Qualitative Research

What is the difference between quantitative and qualitative research? In a nutshell, quantitative research generates numerical data or information that can be converted into numbers. Qualitative Research on the other hand generates non-numerical data.

**Differences**

Only measurable data are being gathered and analyzed in quantitative research [1].

Qualitative research [2] focuses on gathering of mainly verbal data rather than measurements. Gathered information is then analyzed in an interpretative manner, subjective, impressionistic or even diagnostic.

**Qualitative vs Quantitative Research**

Here’s a more detailed point-by-point comparison between the two types of research:

1. **Goal or Aim of the Research**

The primary aim of a Qualitative Research is to provide a complete, detailed description of the research topic. It is usually more exploratory in nature.

Quantitative Research on the other hand focuses more in counting and classifying features and constructing statistical models [3] and figures to explain what is observed.

Read also: Aims of Research [4]
Qualitative | Quantitative
---|---
**Hypothesis** | Broad | Narrow
**Description** | Whole picture | Focused
**Type of Research** | Exploratory | Conclusive

2. **Usage**

Qualitative Research is ideal for earlier phases of research projects while for the latter part of the research project, Quantitative Research is highly recommended. Quantitative Research provides the researcher a clearer picture of what to expect in his research compared to Qualitative Research.

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<th>Qualitative</th>
<th>Quantitative</th>
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<td><strong>Phase</strong></td>
<td>Early</td>
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3. **Data Gathering Instrument**

The researcher serves as the primary data gathering instrument in Qualitative Research. Here, the researcher employs various data-gathering strategies, depending upon the thrust or approach of his research. Examples of data-gathering strategies used in Qualitative Research are individual in-depth interviews, structured and non-structured interviews, focus groups, narratives, content or documentary analysis, participant observation and archival research.

On the other hand, Quantitative Research makes use of tools such as questionnaires, surveys, measurements and other equipment to collect numerical or measurable data.

4. **Type of Data**

The presentation of data in a Qualitative Research is in the form of words (from interviews) and images (videos) or objects (such as artifacts). If you are conducting a Qualitative Research what will most likely appear in your discussion are figures in the form of graphs. However, if you are conducting a Quantitative Research, what will most likely appear in your discussion are tables containing data in the form of numbers and statistics.

5. **Approach**

Qualitative Research is primarily subjective in approach as it seeks to understand human behavior and reasons that govern such behavior. Researchers have the tendency to become subjectively immersed in the subject matter in this type of research method.

In Quantitative Research, researchers tend to remain objectively separated from the subject matter. This is because Quantitative Research is objective in approach in the sense that it only seeks precise measurements and analysis of target concepts to answer his inquiry.

Read also: Qualitative research [2], Quantitative research [1]

**Determining Which Method Should Be Used**
Debates have been ongoing, tackling which method is better than the other. The reason why this remains unresolved until now is that, each has its own strengths and weaknesses which actually vary depending upon the topic the researcher wants to discuss. This then leads us to the question “Which method should be used?”

If your study aims to find out the answer to an inquiry through numerical evidence, then you should make use of the Quantitative Research. However, if in your study you wish to explain further why this particular event happened, or why this particular phenomenon is the case, then you should make use of Qualitative Research.

**Conclusion**

Some studies make use of both Quantitative and Qualitative Research, letting the two complement each other. If your study aims to find out, for example, what the dominant human behavior is towards a particular object or event and at the same time aims to examine why this is the case, it is then ideal to make use of both methods.

**Related pages:**

- Quantitative and Qualitative Research [5]
- Quantitative Research [1]
- Qualitative Research [2]

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