Qualitative Research Versus Quantitative Research

Facts are basic observations known to be true. They are proven and verified to be true by data, statistics, or observations. An example of this is the country's economic growth for 2018 stood at 6.2 percent, which is measured using the gross domestic product (GDP) and computed by the Philippine Statistics Authority (PSA).

Meanwhile, concepts are simply thoughts or ideas conceived in the mind. Concepts are words that describe objects, properties or events. An example of this is the concept of employment, which means an engagement of a person in some occupation, business, trade or profession.

Theory on the other hand is a set of interrelated concepts that give a systematic view of a phenomenon. It could be an argument, a discussion, or a rationale that helps explain or clarify things, events or phenomena. Theories make use of facts to provide an in-depth explanation or clarification of an observation. Theories are established through the formulation of a hypothesis, which can then be tested through observation, research or experiment. Facts enable us to formulate, reformulate, reject or clarify a theory, thereby increasing the general body of knowledge. In particular, the labor theory of value (LTV), which suggests that the value of a commodity is determined by the amount of labor necessary to produce them, has already been debunked since the 19th century as data and observations made by then economists differ, hence the formulation of another theory.

Qualitative Research

Qualitative research is exploratory in nature as it is used to discover and gain an in-depth understanding of individual experiences, thoughts, opinions, and trends, and to dig deeper into the problem at hand. Its objective is to establish patterns or to develop a theory that would explain how and why an event occurs. It likewise posits interrelationships among concepts. It is inductive in nature as it first gathers data before formulating a theory. Qualitative research generates textual or non-numerical data through key informant interviews (KII), focus group discussions, and behavioral observations, among others. One advantage of qualitative research is its ability to deeply probe and obtain rich descriptive data, which allows for a greater understanding of events, processes, or phenomena. Questions raised are usually broad and open-ended, which allows participants to raise and share issues and concerns. The sample size in qualitative research is typically small.

But despite this small sample size, qualitative research is generally time-consuming as it sometimes entails longer time spent gathering data in the field and transcribing interviews. Aside from scientific skills, this form of research is also largely dependent on the social skill of the researcher who interacts and communicates with the target participants. Furthermore, studies are not easily replicable and findings not generalizable to the general population. As it lacks rigorous scientific controls and numerical data, qualitative findings is often dismissed by some researchers as anecdotal information.

Quantitative Research

Quantitative research as the name implies quantifies opinions, attitudes, behaviors, and other defined variables with the goal of supporting or refuting hypotheses about a specific phenomenon. It seeks to obtain accurate and reliable measurements that allow statistical analysis. It uses measurable data to formulate facts and uncover patterns in research. It is deductive in nature as the theoretical framework is expected to be formulated prior to data gathering. An advantage of quantitative research is that data collection methods are much more structured than Qualitative data collection methods and use formal instruments for data collection and analysis. Quantitative data collection includes questionnaires, surveys, or structured interviews, among others. Quantitative research allows the establishment of clear variables, namely: dependent and independent variables. Another advantage is that its results are highly reliable and generalizable to a larger population. Data obtained through quantitative research is easier to summarize, hence it is easier to make comparisons, and generate relationships with the use of statistical tools.

However, one disadvantage of quantitative research is that the artificial environment yields laboratory results that may not correspond to real-world results. Further, standard questions may lead to structural bias and false representation. Survey instruments are likewise vulnerable to errors, such as mistakes in encoding and measurement. Quantitative research is likewise expensive due to the large sample size.