**Case Study Method**

This module describes the case study method of descriptive research and its uses.

**Learning Objectives:**

* Define case study research.
* List reasons researchers use the case study method
* Explain the how data is recorded when using the case study method.
* Describe the benefits and limitations of using the case study method.

Case study research refers to an in-depth, detailed study of an individual or a small group of individuals.  Such studies are typically qualitative in nature, resulting in a narrative description of behavior or experience.  Case study research is not used to determine cause and effect, nor is it used to discover generalizable truths or make predictions. Rather, the emphasis in case study research is placed on exploration and description of a phenomenon.   The main characteristics of case study research are that it is narrowly focused, provides a high level of detail, and is able to combine both objective and subjective data to achieve an in-depth understanding.

Quantitative studies commonly ask questions of who, what, where, how much and how many.  Case studies, on the other hand, are used to answer questions of how or why.  They are commonly used to collect in-depth data in a natural setting where the researcher has little or no control over the events and there is a real life context. Often times, the goal of a case study is provide information that may research in the formation of a hypothesis for future research.   Case studies are commonly used in social science research and educational settings.  For example, case studies may be used to study psychological problems such as the development of a child raised by a single, deaf parent or the effects on a child who had been isolated, abused and neglected until the age of 12 years old.  Case studies could also be used in an educational setting to explore the development of writing skills in a small group of high school freshmen taking a creative writing class.

There are several types of case study methods.  The method selected depends upon the nature of the question being asked and the goals of the researcher.  Following is a list of the different types of case studies:

* **Illustrative** – This type of method is used to “illustrate” or describe an event or situation in such a way that people can become more familiar with the topic in question and perhaps become acquainted with the terminology associated with the topic.
* **Exploratory** – This method is a condensed case study and the purpose is to gather basic, initial data that could be used to identify a particular question for a larger study. This study is not designed to produce detailed data from which any conclusions could be drawn.  It is simply exploratory in nature.
* **Cumulative** – The cumulative method is designed to pull together information for several events/situations and aggregate it in such a way that it allows for greater generalization. It has the advantage of saving time and money by not creating new and repetitive studies.
* **Critical Instance** – These studies are used to examine situations of unique interest or to challenge a universal or generalized belief. Such studies are not to create new generalizations. Rather, several situations or events may be examined to raise questions or challenge previously held assertions.

Once the question has been identified and the basic type of case study method has been selected, the researcher will need to begin designing their case study approach.  In order to obtain a full and detailed picture of the participant or small group, the researcher can use a variety of approaches and methods to collect data.  These methods may include interviews, field studies, protocol or transcript analyses, direct participant observations, a review of documents and archived records, and an exploration of artifacts.  Researchers may choose to use one of these methods to collect data (single method approach) or they may use several methods (multi-modal approach).

After the researcher has determined the data collection methods and what type of data will be used and recorded in the study, he or she will need to decide upon a strategy for analyzing the data.  Case study researchers typically interpret their data either holistically or through coding procedures.  A holistic approach reviews all of the data as a whole and attempts to draw conclusions based on the data in its entirety. This is an appropriate approach when the question being studied is more general in nature and the data provides an overview.  Sometimes, it may be more useful to break the data into smaller pieces.  This usually involves searching the data to identify and categorize specific actions or characteristics. These categories can be assigned a numeric code that allows the data to be analyzed using statistical, quantitative methods.

Regardless of the type of case study, data collection method or data analysis method, all case studies have advantages and disadvantages.  The following list discusses the potential benefits and limitations associated with using case study research methods:

**Advantages:**

* Case studies are more flexible than many other types of research and allow the researcher to discover and explore as the research develops.
* Case studies emphasize in-depth content. The researcher is able to delve deep and use a variety of data sources to get a complete picture.
* The data is collected in a natural setting and context.
* Often leads to the creation of new hypotheses that can be tested later.
* Case studies often shed new light on an established theory that results in further exploration.
* Researchers are able to study and analyze situations, events and behaviors that could be created in a laboratory setting.

**Disadvantages:**

* The uniqueness of the data usually means that it is not able to be replicated.
* Case studies have some level of subjectivity and researcher bias may be a problem.
* Because of the in-depth nature of the data, it is not possible to conduct the research on a large scale.
* There are concerns about the reliability, validity and generalizability of the results.

The Resource Links on this page provide a more comprehensive and detailed discussion regarding the types of case study methods, data collection methods and data analysis methods.  In summary, the following video, Case Study, reviews the case study methodology and discusses several types of case study methods.