College of Doctoral Studies

GCU Core Research Designs

Qualitative Descriptive

- **A relatively simple phenomenon is described.**
- Does not clearly fit into one of the other designs.
- Phenomenon has been clearly defined.
- Data Sources:
  - Interviews with a minimum of 10-12 people.
  - May use a second form of data collection, such as field notes or questionnaires.
- Considered the least rigorous qualitative design.

Phenomenology

- The essence of "lived" experiences described by the participants who experienced them are synthesized to describe the phenomenon.
- Phenomenon has been defined to be a "lived" experience and focuses on how the participants find those experiences to be meaningful.
  - Participants must have an experience in common, such as experiencing the death of a child, or living with cancer.
- Focus is on the meaning and description the sample makes of the experience. Must be able to deal with emotional reactions.
- Reality will be the described phenomenon that results from a conscious experience.
- Data Sources:
  - **8-12 in-depth interviews**
  - May use essays or other reflective processes)
  - Researcher needs to make detailed field notes following each interview.

Narrative

- Stories are told by the participants in an interactive fashion with the researcher with the intent of creating a unified narrative or story that describes or explains a life episode (from humanities).
- Phenomenon is defined as a story of an event which will be better understood including causality and relationships.
- Data source:
  - In-depth interactive interviews with 8-12 individuals who are telling “their individual story.”
  - May use other storytelling techniques such as creating timelines of events, etc.

Case Study

- An in-depth analysis of one or more cases that can be a process, program, activity, city event, or person, using a number of data collection approaches (from business).
- Phenomenon is defined as a process, program, activity, city event, or person studied over a specified time period, which is analyzed.
- Three-to-five sources of data (forms of data collection) realize triangulation and depth of analysis.
  - Interviews with 10-15 people
  - Focus groups, observations, document collection, and/or additional forms of data collection
  - Questionnaires, videos, archival data
  - May include both qualitative and quantitative data collection and analysis.
- A multi-case study may include up to 10 cases.

Grounded Theory

- An in-depth analysis of one or more cases that can be a process, program, activity, city event, or person, using a number of data collection approaches (from business).
- A theory or model is developed to describe the phenomenon as a concept, process, interactions, components, or actions (from sociology).
  - A theory or model is developed to describe the phenomenon.
- Involves multiple stages of collecting data often using multiple approaches and multiple groups
- Data Sources:
  - *Iterative interviews*
  - Observations, document collection, and questionnaires with various groups
  - *Data are collected until saturation is achieved, denoting lengthy periods of time in the field.*
- May include both qualitative as well as quantitative data collection and analysis.
- *Typically includes collecting a large volume of data either by larger samples or repeated (iterative) collection from individuals.*

Quasi-experimental

- Designed to demonstrate cause-and-effect relationship between variables. Does not meet all requirements of an experimental design, thus cannot produce an unambiguous cause-and-effect explanation.
- Two or more nearly-equivalent groups to receive one or more treatments and a control group.
- Typically no random assignment -- participants are in pre-existing groups or groups that are naturally formed.
- Inclusion of participants in the control or treatment group is determined by conditions beyond the control of the researcher.
- Conducted with similar rigor and control as experimental studies with clearly defined treatments.
- Requires categorical independent variables and interval or ratio level dependent variables.
- Design contains a confounding variable or factor that prevents the research from obtaining an absolute cause-and-effect answer.

Non –Experimental

- Attempts to demonstrate associative relationships between variables, but does not attempt to produce an unambiguous cause and effect explanation.
- Three types:
  - Descriptive
  - Correlational
  - Causal-comparative

Descriptive Survey

- Describes the opinions, attitudes, or trends of a population numerically .
- Provides a description of individual variables, but not concerned with the relationship between variables.
- Uses a process of surveying a sample to generalize to the population.
- Research may be longitudinal or cross-sectional.
- Returned sample should be hundreds or thousands of surveys in order to generalize to the population.
- Requires at least ordinal or interval level variables.
- Could also be classified as qualitative descriptive depending on the design and collected data.

Correlational

- Determines if there is a relationship between two or more variables on a single group of participants with the intent of predicting or defining a relationship.
- Observes relationships between variables in a naturally occurring setting.
- Includes two or more variables that can be measured quantitatively.
- Valid approaches to data collection such as validated surveys or databases.
- There is a theoretical or logical explanation that can be used to predict a correlation.
- Requires ordinal or interval level data for variables of interest.
- Variables should not or cannot be manipulated.
- Could also be a quasi-experimental study if designed as such.

Causal-Comparative

- Determines the causes of differences that already exist between or within two or more groups on two or more variables.
- Identify one or more groups that serve as independent variable.
- Define the dependent variable on which the groups will be compared.
- Requires at least one categorical variable and ordinal or interval level dependent variables.
- Select sample groups that are as homogeneous as possible.
- Could also be a quasi-experimental study if designed as such.

Things to Consider

- Research designs can be considered along a continuum.
- Different approaches or sub-designs are possible for each methodology/design.
- Classification of experimental or quasi-experimental or non-experimental depends how the study is designed.
  - For example, correlational or causal comparative research could be classified as quasi-experimental, if the study is designed as such.
- *GCU does not recommend using traditional mixed methods because of the extra time and skill development required for this methodological approach.*