

Types of Research Methods: Report #2

Qualitative vs. Quantitative Research

Qualitative research explores non-numerical data and how to make meaning of the data (Creswell & Guetterman, 2019). This research focuses on examining the participant's perceptions and the researcher learns from the participants. Creswell and Guetterman (2019) explain that the research is meant to explore the participant's views and researchers observe participants in their natural environment. Studies can be emergent design allowing the study to change if needed. Data collection in qualitative research can be vast and time-consuming to organize and analyze (Creswell & Guetterman, 2019).

Quantitative research, according to Creswell and Guetterman (2019), allows the researcher to explore a research problem based on a trend or a need to explain more details about a topic. Variables are necessary for quantitative research to understand the relationships between the components of the study. Studies utilize a large number of participants that are generally surveyed (Creswell & Guetterman, 2019).

Both qualitative and quantitative research methods collect and analyze the data in order to relate, compare, and analyze trends emerging from the research. Creswell and Guetterman (2019), explain that each type of research has a set design the researcher is expected to follow. Qualitative research data takes the forms of words that are communicated via interviews, documents, observations, or audiovisual recordings. End reports are less structured and often contain direct quotes from participants. Quantitative research is characterized by the need for a hypothesis. Data comes from surveys and the numbers are reduced to statistics to analyze. A formal report concludes quantitative research that includes extensive statistics (Creswell & Guetterman, 2019).

Narrative Research

Narrative research, as described by Casey (1995), as an overarching category of research that is strongly grounded in storytelling. It describes the lives of individuals through stories about their lives and experiences. Creswell and Guetterman (2019) add that data gathering can focus on one single person or a group where the researcher interviews participants, collects data and then sequences it into chronological order. Participants must be willing to share their stories. Ethical issues can arise in the retelling of the story because the researcher might not accurately report the story as told or participants might forget parts of the story. Reports include the setting and people involved and must be validated prior to completion (Creswell & Guetterman, 2019). Narrative research would be advantageous to use when documenting people who all experienced the same event such as the Chernobyl explosion.

Ethnographic Research

Ethnographic research is described by Creswell and Guetterman (2019) as a type of qualitative research that studies cultural phenomena where the researcher studies society through the viewpoint of the participant to better understand what they encounter. McQueen and Zimmerman (2006) explain ethnographic research comes from the study of anthropology and can be viewed as an extended field trip to experience a culture. Researchers are immersed in their participant's environment for quite some time to gain an understanding of the challenges, motivations, and settings that occur (Creswell & Guetterman, 2019). The time and setting are important to research observations (Creswell & Guetterman, 2019).

According to Creswell and Guetterman (2019), unstructured interviews with open-ended questions are common methods of information gathering in ethnographic research to understand the participant's behaviors in acts, activities, and events. The sample size may be as few as 10

participants however enough observations to create a saturation point are necessary. In this type of research, data is organized, analyzed for patterns, and then synthesized to understand what the key patterns and insights are from the research (Creswell & Guetterman, 2019). Ethnographic research would be advantageous to use to define social norms for a population (Creswell & Guetterman, 2019). For example, a study on the social norms of teenagers who smoke cigarettes compared to peers that do not smoke cigarettes.

Case Study Research

Creswell and Guetterman (2019) explain case study research as research that examines phenomena happening to one test subject in a bound system. The participant can be a person, a school, or a city, but just one test subject. Case studies provide an in-depth study of the case and are generally bound by time or space restrictions. Multiple sources of data like interviews, documents, and artifacts are used in this process and compiled to create a bigger conclusion (Creswell & Guetterman, 2019). Case studies are difficult to replicate because of their unique nature and results cannot be generalized. Case study research is the opposite of experimental research (Creswell & Guetterman, 2019). Case study research would be advantageous to use in medicine where researchers are investigating patients use of a certain drug and the effects it has on their body compared to others using the same drug.

Action Research vs. Formal Research

Creswell and Guetterman (2019) explain that the primary difference between action and formal research is that action research is completed in an educational setting where the researcher engages with the participants while conducting the research. Action research is dynamic and practical. Researchers will often collaborate with colleagues and co-participants in the research (Creswell & Guetterman, 2019). Formal research, often considered scientific and

hypothesis-driven, can be done anywhere and includes rigorous statistical analysis (Creswell & Guetterman, 2019).

Creswell and Guetterman (2019) suggest that a researcher might choose action research to collect data for a survey because the researcher might want to research problems in their own classroom or school so they can improve outcomes for students or staff members. Proximity to the research participants is a benefit for collecting permission and survey data from participants. In addition, follow up information can be collected in personal interviews with open-ended questions (Creswell & Guetterman, 2019).