Research Design and Methodology I

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1. Describe the differences between quantitative and qualitative research methodologies. When is each methodology most appropriate for researching a particular social problem? 2. Why are quantitative studies considered deductive and qualitative studies usually (though not always) inductive? 3. OGS supports two quantitative research designs: quasi-experimental and correlational, and basic qualitative research designs. Compose a summary of these three designs and how/when they are most appropriate. 4. Dissertations consist of five chapters: Introduction, Literature Review, Research Design and Methodology, Data Analysis, and Findings and Recommendations. Briefly explain the purpose of each chapter.

# Question 1

Describe the differences between quantitative and qualitative research methodologies. When is each methodology most appropriate for researching a particular social problem?

Qualitative research deals with words. It describes the subject matter being explored with words and often categories. It is usually inductive. One observes a population or sample for particular instances and generalizes from their presence or non-presence to a theory or conclusion. It is particularly useful to explore matters of interest where context and subjective understandings and feelings are important such as exploring the reasons behind individuals’ behavior. Qualitative research would use descriptive statistics such as frequency, percentage, averages.

Quantitative research involves numbers. It describes the subject matter being explored in terms of numerical values such as counts or measurements. By analyzing the numerical values patterns and relationships may be discovered. This approach is useful to researching social issues when the goal is to measure the extent of an issue, to generalize facts or to determine the impact of specific variables in a larger population using a sample. Quantitative research can use inferential statistics enabling evaluation of data from a sample with the potential ability to apply it with confidence to a larger population depending on the results of the findings.

# Question 2

2. Why are quantitative studies considered deductive and qualitative studies usually (though not always) inductive?

In quantitative studies researchers begin with a specific hypothesis or theory and collect data to test this pre-existing idea with the goal to confirm or refute the hypothesis. Thus it is deductive in that deductive research is a “top-down” approach. Qualitative research tends to be inductive or a bottom-up approach because it starts with observations and moves to broader generalizations or a theory. Given qualitative research is usually geared around observations looking for trends to generalize, it tends to be inductive.

# Question 3

OGS supports two quantitative research designs: quasi-experimental and correlational, and basic qualitative research designs. Compose a summary of these three designs and how/when they are most appropriate.

Quasi-experimental designs evaluate the effect of an intervention (independent variable) on a dependent variable but lack random assignment or control groups, but rather observe existing groups. This study approach is most appropriate when examining existing groups where an intervention is being evaluated for its result or lack of result. This enables study of real-world settings where randomization isn’t feasible.

Correlational designs seek to examine if a relationship exists between two or more variables but does not involve manipulation of the variables or randomization of the groups. This approach allows study of real-world settings of pre-existing data. While unable to establish or prove a causal connection between variables, it does allow for the demonstration of a probable relationship. This is most appropriate for exploring pre-existing groups as they are. For instance one might evaluate the correlation between personal prayer and active worship attendance in a particular population.

Qualitative research focuses on understanding phenomena through collecting and analyzing non-numerical data to gain insights into people’s values, beliefs, feelings, experiences, behavior, and contexts. This is most appropriate when the research aims to explore complex, context-dependent issues and understand participants' perspectives in depth. An example would be interviewing church members about their experiences during the Covid epidemic. The collection of specific responses might point to more generalized trends.

# Question 4

Dissertations consist of five chapters: Introduction, Literature Review, Research Design and Methodology, Data Analysis, and Findings and Recommendations. Briefly explain the purpose of each chapter.

The Introduction chapter sets the stage for the research by presenting the background, context, and significance of the study. It typically includes the research problem, objectives, research questions or hypotheses, and the study’s scope and limitations. The introduction helps readers understand why the research is important and what the study aims to achieve.

The Literature Review chapter surveys existing research and theoretical frameworks relevant to the study. It provides a comprehensive overview of what is already known about the topic, identifies gaps or inconsistencies in the literature, and justifies the need for the current research. This chapter helps establish a theoretical foundation for the study and demonstrates the researcher’s familiarity with relevant scholarship.

The Research Design and Methodology chapter outlines the overall approach and specific methods used to conduct the research. It describes the research design (e.g., qualitative, correlational, quasi-experimental), data collection techniques (e.g., surveys, interviews), and data analysis procedures. This chapter provides a detailed explanation of how the research was conducted and communicates the study's validity and reliability.

The Data Analysis chapter presents the results of the research, including the processing and examination of the data collected. It involves analyzing the data according to the methods described in the previous chapter and interpreting the findings. This chapter often includes tables, graphs, and statistical tests (for quantitative research) or thematic analysis (for qualitative research) to illustrate the results.

The Findings and Recommendations chapter synthesizes the results of the data analysis and discusses their implications. It provides answers to the research questions or addresses the hypotheses, highlights key findings, and offers recommendations based on these results. This chapter may also suggest areas for future research and practical applications of the findings.

WORKS CITED