Chapter Two: Research Philosophy Approaches

2.1 Introduction

This chapter discusses the concept of research philosophy and explores its various approaches within academic research. Understanding research philosophy is essential for selecting appropriate methods and for aligning research design with study objectives. This chapter also outlines the four major philosophical approaches: positivism, interpretivism, pragmatism, and realism. Each philosophy will be described in terms of its assumptions, suitability, and role in guiding data collection and interpretation.

2.2 Definition of Research Philosophy

Research philosophy refers to the system of beliefs and assumptions about the development of knowledge (Saunders et al., 2019). It influences how researchers understand the nature of reality (ontology) and the nature of knowledge (epistemology). In academic research, these philosophical views shape the research design, choice of methods, and interpretation of results.

2.3 Importance of Research Philosophy

Choosing an appropriate research philosophy ensures consistency in the research process. It affects every part of the study, from formulating questions to selecting data collection tools and methods of analysis (Creswell & Creswell, 2018). A well-defined philosophy provides a foundation for justifying the research approach and methodology.

2.4 Major Research Philosophy Approaches

2.4.1 Positivism

Positivism is a philosophy that supports the use of scientific methods to study social reality. It assumes that knowledge is objective and can be discovered through observation and experimentation (Bryman, 2016). Positivist research usually follows a structured methodology, employs large samples, and relies heavily on quantitative data. This approach is commonly used in natural sciences and areas that require statistical analysis.

Example: A researcher studying the impact of medication on neonatal breathing patterns using numerical data and hypothesis testing would likely adopt a positivist philosophy.

2.4.2 Interpretivism

Interpretivism focuses on understanding human behavior by exploring how individuals make sense of their experiences. It assumes that reality is subjective and socially constructed (Denzin & Lincoln, 2018). This philosophy is often used in qualitative research that involves interviews, focus groups, and participant observation.

Example: A researcher examining how neonatal nurses experience ethical challenges in the NICU may adopt an interpretivist approach to explore their personal narratives and meanings.

2.4.3 Pragmatism

Pragmatism rejects the idea of a single truth or method. Instead, it promotes using any approach—qualitative, quantitative, or mixed—that best addresses the research question (Tashakkori & Teddlie, 2010). Pragmatists believe that the value of knowledge lies in its practical application and outcomes.

Example: In a study assessing both neonatal patient outcomes (quantitative) and caregiver experiences (qualitative), a pragmatic philosophy allows the researcher to combine methods effectively.

2.4.4 Realism

Realism holds that reality exists independently of human perception, but our knowledge of it is always influenced by social conditioning and interpretation. It blends features of both positivism and interpretivism (Bhaskar, 2016). Realist research is often used when investigating complex social phenomena and causal relationships.

Example: A researcher studying the socio-medical factors affecting neonatal care outcomes may use realist philosophy to combine objective data with contextual analysis.

2.5 Ontology and Epistemology in Research

Ontology refers to the study of what exists or what is considered "real." Epistemology is the study of how we come to know things (Saunders et al., 2019). Positivism aligns with an objectivist ontology and a positivist epistemology, while interpretivism supports a constructivist ontology and a subjectivist epistemology. Understanding these concepts helps researchers align their philosophy with the research questions and methodology.

2.6 Choosing a Research Philosophy

Selecting the most appropriate research philosophy depends on several factors, including:

- **Nature of the research problem**
- **Research aims and objectives**
- **Type of data to be collected**

- **Researcher's own beliefs and assumptions**

2.7 Summary

This chapter has explored the main research philosophy approaches and their relevance to academic research. It explained the key principles behind positivism, interpretivism, pragmatism, and realism. Each philosophy offers unique strengths depending on the research context and goals. In the next chapter, the discussion will focus on research methods and data collection techniques that align with the selected research philosophy.

References

Bhaskar, R. (2016). *A realist theory of science*. Routledge.

Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Denzin, N. K., & Lincoln, Y. S. (2018). *The SAGE handbook of qualitative research* (5th ed.). SAGE Publications.

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education Limited.

Tashakkori, A., & Teddlie, C. (2010). *Mixed methodology: Combining qualitative and quantitative approaches*. SAGE Publications.