



RESEARCH PARADIGMS AND METHODS

PARADIGMA DAN METODE PENELITIAN

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Abstract

Research paradigms and research methods are two fundamental components that determine the quality, consistency, and credibility of scientific research. However, there are still misunderstandings regarding the relationship between research paradigms and research methods, particularly in determining the approach that best suits the research objectives. This study aims to analyze the concept of research paradigms and their relationship to the selection of research methods. The study employs a qualitative approach using *library research* through the analysis of various relevant scientific sources, including books, journal articles, and conference proceedings. Data were analyzed using *content analysis* to identify and synthesize various concepts related to research paradigms and methods. The results indicate that research paradigms—such as positivism, post-positivism, interpretivism, constructivism, pragmatism, and the critical paradigm—possess distinct characteristics that influence the selection of research methods. Furthermore, the pragmatist paradigm serves as the dominant foundation for the use of *mixed methods*. This study makes a theoretical contribution by clarifying the relationship between research paradigms and research methods and serves as a practical reference for researchers in determining the appropriate research approach.

Keywords : Research Paradigms, Research Methods, Positivism, Pragmatism, Mixed Methods.

Abstrak

Paradigma penelitian dan metode penelitian merupakan dua komponen mendasar yang menentukan kualitas, konsistensi, dan kredibilitas penelitian ilmiah. Namun, masih terdapat kesalahpahaman mengenai hubungan antara paradigma penelitian dan metode penelitian, khususnya dalam menentukan pendekatan yang paling sesuai dengan tujuan penelitian. Studi ini bertujuan untuk menganalisis



konsep paradigma penelitian serta hubungannya dengan pemilihan metode penelitian. Penelitian ini menggunakan pendekatan kualitatif melalui studi pustaka dengan menganalisis berbagai sumber ilmiah yang relevan, termasuk buku, artikel jurnal, dan prosiding konferensi. Data dianalisis menggunakan analisis isi untuk mengidentifikasi dan menyintesis berbagai konsep terkait paradigma dan metode penelitian. Hasil penelitian menunjukkan bahwa paradigma penelitian—seperti positivisme, pasca-positivisme, interpretivisme, konstruktivisme, pragmatisme, dan paradigma kritis—memiliki karakteristik khas yang memengaruhi pemilihan metode penelitian. Selain itu, paradigma pragmatis menjadi landasan dominan bagi penggunaan metode campuran (*mixed methods*). Studi ini memberikan kontribusi teoretis dengan memperjelas hubungan antara paradigma penelitian dan metode penelitian, serta berfungsi sebagai referensi praktis bagi peneliti dalam menentukan pendekatan penelitian yang tepat.

Kata Kunci : Paradigma Penelitian, Metode Penelitian, Positivisme, Pragmatisme, Metode Campuran.

1. INTRODUCTION

Research is one of the primary instruments in the advancement of scientific knowledge, problem-solving, and evidence-based decision-making across various aspects of life. In the era of digital transformation and rapidly advancing technology, the need for high-quality research has become increasingly critical to addressing various social, economic, educational, health, and environmental challenges. The quality of a research study is determined not only by the data collection and analysis techniques used but also by the philosophical foundation underpinning the entire research process. Therefore, an understanding of research paradigms and research methods is a fundamental aspect that every researcher must possess (Mukumbang, 2023).

A research paradigm is a set of beliefs, assumptions, and values that serve as the foundation for researchers in understanding reality, acquiring knowledge, and determining the best way to answer research questions. A paradigm functions as a conceptual framework that influences the selection of research approaches, strategies, and methods employed. In the development of modern science, various paradigms—such as positivism, post-positivism, interpretivism, constructivism, pragmatism, and the critical paradigm—have emerged and made significant contributions to contemporary research practices (Elgeddawy & Abouria, 2024). The diversity of these paradigms demonstrates that reality can be understood through various different perspectives, depending on the research objectives and context.

As the complexity of the phenomena under study increases, discussions regarding the relationship between paradigms and research methods have become increasingly relevant. The various multidimensional issues arising in the era of globalization require researchers to employ approaches that are not only capable of explaining cause-and-effect relationships but also of understanding the meanings, experiences, and social contexts underlying them. These conditions have spurred the development of *mixed-methods research*, which integrates quantitative and qualitative approaches into a single research design. This “ ” approach is increasingly used because it is considered capable of yielding a more comprehensive understanding of a phenomenon compared to the use of a single method in isolation (Aramide et al., 2023).

Nevertheless, various studies indicate that there remains conceptual confusion regarding the relationship between research paradigms and research methods. Many researchers, particularly students and novice researchers, tend to view research methods solely as technical procedures without considering the underlying philosophical assumptions. As a result, there is often a mismatch between the paradigm used and the chosen research method, which can affect the validity and credibility of research findings (Hampson & McKinley, 2023). Furthermore, the rise of interdisciplinary research has also posed new challenges in determining the most appropriate paradigm for explaining complex and dynamic phenomena.



Previous research has extensively discussed the characteristics of various research paradigms and their application across different disciplines. Mukumbang (2023) explains the contribution of the *critical realism* paradigm to the development of mixed-methods research, while Elgeddawy and Abouraia (2024) highlight the importance of pragmatism as a flexible paradigm in contemporary research. On the other hand, Hampson and McKinley (2023) critique the use of pragmatism, which is often regarded as a universal solution in mixed-methods research. Aramide et al. (2023) also found that there remain differing perspectives regarding the position of mixed methods as an approach, a methodology, or a research design. These findings indicate that the discourse on research paradigms and methods is still evolving and requires a more comprehensive examination.

Based on this literature review, there is a *research gap* in that there are not yet many studies that systematically integrate discussions of research paradigms with their implications for the selection of research methods in the context of contemporary research. Most previous studies have focused on discussing paradigms or methods separately, thus failing to provide a complete understanding of the philosophical and methodological relationship between the two. In fact, a comprehensive understanding of this relationship is crucial to ensuring the consistency and quality of research.

Therefore, this study aims to analyze the concept of research paradigms and their relationship to research methods. Specifically, this study seeks to identify the characteristics of various research paradigms, explain the influence of paradigms on the selection of research methods, and examine their relevance in addressing research challenges in the modern era. Thus, this study is expected to provide a deeper understanding of the importance of alignment between paradigms and methods in the scientific research process.

The novelty of this study lies in its integrative approach, which connects the philosophical aspects of research paradigms with the methodological practices that have evolved in contemporary research. Theoretically, this study contributes to clarifying the relationship between research paradigms, approaches, and methods. Practically, the results of this study can serve as a reference for students, academics, and researchers in determining the research paradigms and methods that align with their research objectives, thereby enhancing the quality, validity, and credibility of research findings.

2. RESEARCH METHOD

This study employs a qualitative approach using *library research* to conduct an in-depth examination of the concepts of research paradigms and methods based on various relevant scholarly sources. The research subjects consist of academic literature discussing research paradigms, including positivism, post-positivism, interpretivism, constructivism, pragmatism, and the critical paradigm, as well as their relationship to quantitative, qualitative, and mixed-methods research approaches. The research data sources consist of articles from reputable national and international journals, research methodology books, scientific proceedings, and other academic documents published primarily within the last five years. Sources were selected using *purposive sampling* based on criteria of relevance, credibility, and direct relevance to the research focus (Creswell & Creswell, 2023).

The primary instrument in this study is the researcher (*human instrument*), who plays a role in identifying, selecting, categorizing, and interpreting data from various literature sources. To enhance the consistency of data collection, documentation sheets and a literature review matrix were used, containing information regarding the source's identity, research objectives, the paradigm employed, research methods, and the main findings of each reference. Data validity was ensured through source triangulation by comparing information from various credible and relevant sources, while reliability was ensured through systematic re-examination of the results of data classification and interpretation (Miles et al., 2020).

The data collection process was conducted in several stages: identifying literature using academic databases such as Google Scholar, Scopus, ScienceDirect, and SpringerLink; selecting literature based on inclusion and exclusion criteria; classifying sources by theme and focus of



discussion; and documenting the data into a literature matrix. Next, all collected data were verified through a *cross-checking* process to ensure the accuracy and consistency of the information used in the study.

Data analysis was conducted using *content* analysis techniques aimed at identifying, comparing, and synthesizing various concepts and findings present in the literature sources. The analysis was carried out through the stages of data reduction, data presentation, interpretation, and drawing conclusions, as outlined by Miles, Huberman, and Saldaña (2020). This technique was chosen because it enables a comprehensive understanding of the relationship between research paradigms and methods. The entire research process was conducted in accordance with the principles of academic ethics through the use of valid sources, proper citation, and the avoidance of plagiarism to ensure the transparency and credibility of the research results.

3. RESULT AND DISCUSSION

The results of the literature review indicate that research paradigms play a crucial role in determining the direction, approach, and methods used in a study. Based on an analysis of various sources, it was found that the most commonly used research paradigms in contemporary research include positivism, post-positivism, interpretivism, constructivism, pragmatism, and the critical paradigm. Each paradigm has distinct ontological, epistemological, and methodological assumptions, resulting in different research approaches. The positivist paradigm tends to use quantitative methods to test relationships between variables in an objectively manner, whereas the interpretivist and constructivist paradigms rely more heavily on qualitative methods to gain a deep understanding of meaning and social experiences (Creswell & Creswell, 2023).

The findings also indicate that the development of multidisciplinary research has spurred an increase in the use of *mixed-methods research*. This approach allows researchers to combine the strengths of quantitative and qualitative methods to gain a more comprehensive understanding of a phenomenon. In this context, the pragmatist paradigm serves as the most widely used philosophical foundation because it offers flexibility in selecting methods according to research needs (Aramide et al., 2023).

Table Characteristics of Research Paradigms and Methods

Paradigm	Main Focus	Dominant Methods	Research Objectives
Positivism	Objective facts and measurement	Quantitative	Testing hypotheses and generalizations
Post-Positivism	Predictable objective reality	Quantitative and qualitative	Strengthening the validity of findings
Interpretivism	Meaning and social experience	Qualitative	Gaining a deep understanding of phenomena
Constructivism	Social construction of reality	Qualitative	Interpreting subjective meaning
Pragmatism	Research problem-solving	Mixed Methods	Generating practical solutions
Critical Paradigm	Social Change and Emancipation	Participatory Qualitative	Promoting social transformation

Source: Adapted from Creswell and Creswell (2023), Mukumbang (2023), and Elgeddawy and Abouria (2024).

Furthermore, it was found that the alignment between the research paradigm and methodology is a crucial factor in ensuring the consistency, validity, and credibility of research findings. A mismatch between the paradigm and methodology has the potential to introduce conceptual bias that may affect the interpretation of research results. Therefore, an understanding of the philosophical foundations of the research is an essential prerequisite before determining the methodology to be used.



Discussion

The research findings indicate that the research paradigm not only serves as a philosophical foundation but also acts as a guideline for determining the appropriate research strategy. These results align with the view of Creswell and Creswell (2023), who state that a paradigm is a set of basic assumptions that influence how researchers understand reality, acquire knowledge, and select research methods. Thus, the selection of research methods cannot be done in isolation from the underlying paradigm.

The finding regarding the dominance of the pragmatist paradigm in contemporary research indicates a shift from dichotomous methodological debates toward a more flexible and integrative approach. These results support the research by Aramide et al. (2023), which explains that the increasing complexity of research problems drives the use of mixed methods to produce a more comprehensive understanding. The pragmatist paradigm allows researchers to choose the methods best suited to their research objectives without being strictly bound to a single specific approach.

On the other hand, the research findings also indicate that the paradigms of interpretivism and constructivism remain highly relevant, particularly in social sciences, education, and the humanities. These paradigms provide researchers with the flexibility to understand meanings, experiences, and social constructions that cannot be adequately explained through quantitative approaches. This finding aligns with the research by Pilcher and Cortazzi (2024), which emphasizes that the complexity of social phenomena requires a methodological approach capable of capturing the subjective and contextual aspects of social reality.

The study's results also reveal that there remains a tendency among some researchers to select research methods based solely on technical considerations without considering paradigmatic appropriateness. This situation has the potential to create inconsistencies between research questions, the methods used, and the interpretation of research results. Hampson and McKinley (2023) explain that a misunderstanding of the relationship between paradigms and methods can lead to weak methodological justification and diminish the quality of the resulting research.

Theoretically, this study reinforces the view that research paradigms and methods are two interrelated and inseparable components in the scientific research process. Practically, the results of this study can serve as a guide for students, academics, and researchers in determining the paradigms and methods appropriate for their research objectives, thereby enabling them to produce more systematic, valid, and credible research.

This study has limitations because it relies solely on secondary data sources, namely literature, and does not involve empirical field data. Therefore, future research could expand upon this study through empirical research that explores the application of various research paradigms and methods within the context of specific academic disciplines to gain a deeper understanding of their effectiveness and relevance in research practice.

4. CONCLUSION

Based on the results of the study and discussion, it can be concluded that the research paradigm plays a very important role in determining the direction, approach, and methods used in a study. Each paradigm—whether positivism, post-positivism, interpretivism, constructivism, pragmatism, or the critical paradigm—has distinct philosophical assumptions that influence how researchers understand reality, acquire knowledge, and interpret research findings. Therefore, the selection of research methods must consider their alignment with the chosen paradigm to ensure consistency and credibility in the research process.

Research findings also indicate that contemporary research trends favor the use of more flexible approaches, particularly through mixed *methods*, which are widely supported by the pragmatist paradigm. This trend indicates that the complexity of current research phenomena requires an approach capable of integrating various methods to produce a more comprehensive understanding.



Nevertheless, both qualitative and quantitative paradigms remain highly relevant depending on the characteristics and objectives of the research being conducted.

Theoretically, this study reinforces the understanding of the interrelationship between research paradigms and methods as two inseparable components in the scientific research process. Practically, the findings of this study can serve as a reference for students, academics, and researchers in determining the appropriate paradigm and methods in accordance with the research objectives. Future research is recommended to empirically examine the application of various research paradigms and methods in specific fields of science so as to provide a more in-depth picture of their effectiveness and relevance in research practice.

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