

Article

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Shifting Research Paradigms in Educational Research: From Positivism to Interpretivism

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Abstract: This essay explores the evolution of research philosophy in educational research, highlighting the transition from positivism to interpretivism. The initial reliance on positivist methodologies, which emphasize quantitative research and data analysis, evolved through coursework and practical experiences. Critical turning points in teaching and research projects revealed the limitations of a monolithic approach, prompting the adoption of interpretivism. This shift emphasizes the importance of understanding diverse student backgrounds and the researcher's positionality. Interpretivism, which views knowledge as socially constructed and context-dependent, complements quantitative methods with qualitative insights. The essay advocates for a mixed-methods approach to educational research, ensuring a comprehensive understanding of complex educational phenomena. This integrated approach aims to tailor research methodologies to varied educational contexts, enhancing the relevance and impact of educational research.

Keywords: educational research philosophy; positivism and interpretivism; mixed-methods approach

1. Introduction

This essay explores the evolving research philosophy in the field of educational research, significantly influenced by recent coursework. The course has enhanced the comprehension of the intricate terrain of educational research, prompting a re-evaluation of preconceived notions and enriching scholarly endeavors. This essay focuses on the comprehension and convictions regarding research philosophy, reflecting on numerous research philosophy topics and providing perspectives based on experience. Researchers must grasp the fundamental principles of ontological and epistemological assumptions and their impact on selecting appropriate methodological approaches (Alharahsheh & Pius, 2020). The interpretative researcher acknowledges the observer's influence on the observed, recognizing that reality is a product of human perception and understanding (Wellington, 2015). Hence, this essay will explore the shift from a positivist perspective to an interpretivist one.

2. Exploring Positivism: Initial Encounters

Park et al. (2020) assert that "Positivist methodology emphasizes engaging in research in settings where variables can be controlled and manipulated." Initially, a lack of comprehension of research philosophy led to an exclusive reliance on research report findings to validate points. Through studying research philosophy paradigms in the EDU202

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course, a clearer understanding and appreciation for the positivist paradigm were developed. This paradigm promotes quantitative research methodologies and depends significantly on data analysis. Further study throughout the course deepened the understanding of positivist ontology and epistemology, fostering an interest in the positivist approach, which was later applied in studies. During EDU203, an educational research project aimed to evaluate the impact and challenges of remote instruction on student academic attainment by analyzing student performance data. This process involved managing and interpreting statistical data, prioritizing objectivity, and producing intuitive and clear patterns for analysis.

3. Critical Turning Points: Teaching and Learning

During a tenure as a teaching assistant and participant in an educational research project, a pivotal moment occurred, changing perspectives on research methods and educational ideals. Initially, the belief was that using student performance data and other relevant data could conduct a direct analysis of teaching techniques and student learning scenarios to enhance future research. However, academic studies revealed significant problems with this method. The inability to communicate and interact with students from varied cultural backgrounds highlighted the limitations of a monolithic technique. Quantitative data analysis is essential to accurately represent learning levels and instructional method changes, yet it led to reservations about fully embracing positivism. More multifaceted research methods were explored to address the complex and diverse elements of the education sector effectively. According to Bourke (2014), a researcher's social and cultural background significantly impacts the research process and findings, emphasizing the concept of positionality. The EDU202 lecture deepened the understanding of this concept, sparking interest in interpretivism and encouraging a review of previous research viewpoints through a more critical lens. Researchers must consider their positionality and how it affects their connections with research participants and the overall quality of their research (Bourke, 2014). An interpretivist viewpoint helps clarify the researcher's perspective and positionality (Smith et al., 2021). Alharahsheh and Pius (2020) state that interpretivism originated as a response to positivism's inadequacies by highlighting the subjective perspective. Thus, research methods and teaching skills must exhibit a deep understanding and appreciation for students' diverse backgrounds, considering biases and perspectives, facilitated by a broadened grasp of interpretivism. As mentioned in Appendix 1, detailing the researcher's academic background, cultural identity, gender, experience, and how these factors may affect the perspective and interpretation of the research is crucial.

4. Theoretical Shift: Insights from EDU202

After gaining a better understanding of research philosophy, the research paradigm shifted from positivism to interpretivism, guided by Gadamer's (1970) observation that "To understand is always to understand differently." This viewpoint underscores the belief that people are consistently the most important aspect of ECC research. Interpretivist ontology takes a relativist perspective to reality, understanding it as intersubjective, infusing meaning into social and experiential study and knowledge (Junjie & Yingxin, 2022). From this perspective, the foundation for comprehending and shaping reality lies within each individual's unique personal experiences. Educational experiences during one's early years significantly impact understanding and perception of education, demonstrating clear subjectivity and reliance on context in conversation and decision-making processes. Compared to positivism, interpretivist ontology focuses on students' view of the world, aligning more consistently with early childhood education research.

Interpretivism maintains that humans and knowledge are intricately linked, created within specific social and historical contexts (Saunders et al., 2012). According to Schwandt (1994), knowledge is derived not only from viewing the objective world but also from people's activities and connections. Thus, knowledge acquisition is a dynamic

process, continuously constructed and reconstructed through contact and dialogue within society. Interpretivism emphasizes the importance of subjectivity and social construction, where each person's interpretive behavior is impacted by personal ideas, expectations, and past experiences, evolving with ongoing exposure to new information. This viewpoint highlights the importance of varied perspectives and collaborative situations in enhancing and widening understanding.

Believing that both quantitative and qualitative research are equally valuable, the selection and use of mixed research methods are favored (see Appendix 2). Employing mixed methods does not imply contradiction with the chosen paradigm. According to McChesney and Aldridge (2019), interpretivist researchers can use mixed methods as long as they clearly define their paradigmatic perspective and ensure the chosen method aligns with this viewpoint. The dialectical attitude aids interpretivist scholars, advocating for using both quantitative and qualitative methodologies to gain a more thorough understanding of social phenomena (Shan, 2022). Wellington (2015) emphasized the importance of selecting research methods suitable for the educational profession, rather than merely replicating typical scientific research methods. Thus, interpretivism and quantitative research methodologies can coexist and enhance each other's effectiveness, rather than being mutually exclusive.

Quantitative research in educational research assumes that researchers can measure aspects of phenomena in the world, relying on dependent and independent variables. The process is typically deductive, involving the collection of measurements, the application of analysis, and the drawing of conclusions (Watson, 2015). Quantitative research holds the capacity to yield highly objective and conclusive findings, greatly contributing to the direct evaluation of educational outcomes. Using questionnaires and data analysis to perform 203 surveys, it was possible to ascertain the precise number of students impacted by remote learning, enabling valid conclusions and informed decisions. Qualitative research, on the other hand, allows scientists to investigate the significance of human experience and the complexities of educational situations, particularly beneficial for examining the effect of individual features, various environmental circumstances, and personal interpretations on educational achievements (Smeyers, 2008).

5. Conclusion

The process of developing this philosophical reflection has been beneficial and fascinating, encouraging and supporting the transition from positivist to interpretivist thinking. This reflective process not only improved the grasp of each philosophical paradigm of research but also highlighted the significance of tailoring research methodologies to varied educational contexts and individual circumstances using an integrated approach. As a result, the emphasis for next year's dissertation will be on mixed approaches, explaining the practical application in real-world educational contexts, and the researcher's complex background. This will enable the effective application of interpretive techniques and methodological frameworks to gain vital insights, ensuring the research is informed and relevant to the specific case under consideration. This comprehensive and relevant approach will address educational research concerns more effectively.

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