

Overview of Various Types of Research Philosophies and Their Importance

Tulsa Devi Dulal

Faculty Member

*Department of Population Studies,
Patan Multiple Campus, TU, Nepal
tulasadulal123@gmail.com*

Doi: <https://doi.org/10.3126/pragya.v14i1.90727>

Abstract

This article serves as a guide for early-career researchers to understand foundational beliefs that inform research. It clarifies concepts by defining various research philosophies, including positivism, Post-Positivism, interpretivism, critical realism, and pragmatism, as well as related ideas like research paradigms, ontology, epistemology, axiology, design, and methodology. The impact of research philosophy on methodological choices for data collection and analysis is highlighted, using secondary data through meta-analysis. The paper covers key paradigms: Positivism emphasizes objective truths with quantitative methods; Post-Positivism acknowledges researcher influence; Interpretivism focuses on subjective meanings with qualitative methods; Constructivism views knowledge as socially constructed; Pragmatism uses mixed methods for practical solutions; and critical realism integrates positivism and interpretivism to uncover social structures. The article provides practical examples to guide project development.

Key words: positivism, post-positivism, constructivism, interpretivism, pragmatism, critical realism.

Introduction

Research philosophy and research paradigm are terms used interchangeably to describe the set of beliefs, assumptions, and principles that underlie the way a study is approached. These assumptions can be objective or subjective, and can impact the approach to the study.

The research paradigm, originating from Greek, is a framework for scientific and academic ideas, often influenced by philosophy. It is a shared belief system that guides data interpretation and shapes the research approach. It influences the researcher's philosophical mindset, assumptions, and foundational worldview. Paradigms are crucial as they dictate

what to study, how to study it, and how to interpret results. They shape the researcher's foundational perspective for data interpretation (Saunders et al. (2019).

A "research paradigm" is the set of ideas, principles, and presumptions that guide researchers in their investigations, impacting how they perceive the world, how they gather data, and how they interpret the results. It provides a framework for research in a particular field and is frequently based on philosophical viewpoints like positivism or interpretivism. Epistemology is a research philosophy component that identifies sources of knowledge. It consists of four levels: intuitive, authoritarian, logical, and empirical. Intuitive knowledge is superficial and based on feelings and beliefs, while authoritarian knowledge is based on expert opinions and pre-existing research. Logical knowledge synthesizes multiple sources of authoritarian knowledge, and empirical knowledge is obtained through objective tests (Edelheim, 2014).

In academic research, research philosophy is crucial because it directs methodology and direction. A "system of beliefs and assumptions about the development of knowledge" is its definition (Saunders et al., 2015). This way, research philosophy is the driving force behind a study that illustrates the researcher's perception of a particular phenomenon in light of their values, beliefs, and assumptions on the subject matter. There are different philosophies of research that address the collection and interpretation of data through various means. For example, positivism relies on the empirical observation of data, whereas critical realism argues that perception may be misleading (O'Gorman and MacIntosh, 2015). In turn, interpretivism draws the distinction between social studies and natural sciences. While the latter remains influenced by objective laws of physics and mathematics, the former is susceptible to subjective judgment due to the nature of the subject matter. Thus, selecting research philosophy is a crucial step that dictates a study's methodology and guiding principles. Research philosophy is shaped by three key components: A research philosophy known as positivism emphasizes an objective understanding of reality, defining values as distinct from research findings. It relies on quantifiable and empirical observations to assert the existence of an observable reality and promotes value-neutrality to ensure objective conclusions through quantitative methods like surveys and experiments. In contrast, interpretivism views reality as comprised of multiple socially constructed truths, focusing on understanding subjective meanings and the importance of context. It utilizes qualitative methods such as ethnography and case studies, acknowledging researcher biases and advocating for transparency, with the belief that societal changes can alter perceptions of reality (Testbook ,2024).

Research philosophy also encapsulates the nature of the knowledge one seeks to obtain, such as whether to expect hard, clean answers or softer, more opaque ones. The difference between these terms depends on the context, with some textbooks defining philosophy as about the researcher, while others use them interchangeably. Understanding the philosophy of a research project is crucial for aligning the rest of the methodological decisions. The "big three" approaches to research philosophy are positivism, interpretivism, and pragmatism, which are a solid starting point for understanding the nature of reality and knowledge (D.Tech, 2023).

A philosophical viewpoint, Positivism focuses on the scientific study of natural phenomena through empirical evidence. Positivism is a 19th-century philosophical approach that emphasizes empirical data and scientific methodologies to establish precise knowledge through observation, experimentation, and verification. Key characteristics include objectivity, quantitative analysis, generalizability, deductive reasoning, and replicability. It opposes metaphysics, focusing instead on behavioral reinforcers, and utilizes the scientific method to discover truth and understand the world. In contrast, post-positivism acknowledges the limitations of positivism. Post-positivism highlighting the influence of values, beliefs, and subjectivity on scientific inquiry. Constructivism asserts that knowledge and reality are created by individuals based on their experiences and interactions with the world (Tashakkori & Teddlie, 2003).

Interpretivism emphasizes the subjective nature of reality and the importance of understanding subjective human experience. Interpretivism emphasizes advocacy or participatory research paradigms prioritize the active engagement of community members and stakeholders throughout the research process. Ontology, as a key component of research paradigms, explores existence and reality, epistemology deals with knowledge acquisition and limits, axiology involves ethical and aesthetic values, and methodology analyzes applied methods (Somekh & Lewin, 2005).

Research is a crucial academic topic, involving an organized, systematic, and critical inquiry to solve identified problems. Research paradigms are fundamental philosophical and notional structures that guide researchers' approaches and understanding of their subjects. These paradigms provide a general guide for conducting research, analyzing data, and interpreting findings. Understanding research paradigms is essential for social scientists to make informed decisions and critically evaluate others' research. This article systematically compares research paradigms, detailing differences in ontology, epistemology, methodology, and axiology, and clarifies their practical impact on research design and data

interpretation. It also examines how paradigms apply across diverse disciplines, enhancing their relevance and utility.

Objectives:

The objective of this review paper explores the development of research philosophy and paradigm, tracing its evolution from ancient civilizations to contemporary manifestations through various epochs, movements, and paradigms.

Method and Materials:

This article, based on exploratory qualitative research using secondary data, is crucial for novice researchers to identify qualitative research designs and implement appropriate ones. It uses lexicons and phrases related to research paradigms and materials from scholarly articles, website materials, and books.

Interpretation

Auguste Comte, a French philosopher, established positivism, a philosophical movement focusing on social phenomena. Influenced by thinkers like Hume, Kant, and Henri de Saint-Simon, it was later influenced by Descartes and Locke during the Enlightenment period in 17th and 18th in centuries.

Auguste Comte a French philosopher (1798–1857) established positivism and the science of sociology, studying social phenomena similarly to natural phenomena. He influenced by thinkers like David Hume and Immanuel Kant, as well as Henri de Saint-Simon, later influenced by Descartes and Locke during the Enlightenment period in 17th and 18th in centuries.

Comte emphasized scientific methods for societal observation and coined the term "sociology". He is often regarded as the father of sociology, with positivism asserting that knowledge of social phenomena relies on observable and measurable evidence (Study Smarter UK, 2022).

Positivism uses experimentation and data collection to interpret natural laws, shaping scientific breakthroughs and clinicians' approaches. Despite being widely used in physical and social sciences for its high standards of validity and reliability, positivism is often criticized for being scientific and not completely free from human bias (Handbook, 2005).

Paradigm 1: Positivism:

Positivism, originating from the Enlightenment scientific revolution, focuses on understanding the natural world through empirical and scientific knowledge. It uses quantitative measurement to mitigate personal biases and is widely used in physical and social sciences. Positive theories analyze the world as it is, focusing on physical components like nations and international organizations. They emphasize causal relationships, empirical data, and larger samples for better understanding (Park, 2020)

Positivism is a philosophical approach to understanding the world, originating in the 19th century. It emphasizes empirical data and scientific methodologies, aiming to establish a precise methodology for knowledge acquisition through observation, experimentation, and verification. Key characteristics of positivist research include objectivity, quantitative analysis, generalizability, deductive reasoning, and replicability. Positivism opposes metaphysics and focuses on positive and negative reinforcers of behavior. The scientific method is used to discover the truth and gain a sufficient understanding of the world (Reich, 1994).

The fundamental difference between Reich (1994) and "DTech (2023)" lies in their stance on objectivity. Reich advocates for a post-positivist approach, critiquing positivism and arguing that strict objectivity is inadequate in human-centered fields. He emphasizes the inaccuracies of observation due to inherent biases and promotes a methodology that incorporates human values. In contrast, "DTech (2023)" employs a positivist framework focused on empirical observation and objective data within the cyber-security context, aiming for measurable results without significant consideration of subjective aspects. This distinction highlights the contrasting philosophical underpinnings of their respective research methodologies. This philosophy often manifests in methodologies using quantitative data and often adopts experimental or quasi-experimental research designs. The focus is on causal relationships, understanding which variables affect other variables (DTech, 2023).

The positivist research paradigm **ontology** asserts on a single, objective reality, while epistemology argues for knowledge acquisition objectively through quantitative methods and hypothetico-deductive models. **Axiology** emphasizes the separation of facts and values, dismissing subjective experiences as irrelevant. Ontology believes in a real world, while epistemology emphasizes objectivity and detachment from subjects. Axiology emphasizes value-neutrality, distinguishing between factual observations and value judgments, and dismissing subjective experiences as irrelevant.

Paradigm II: Post-Positivism:

Post-positivism is a meta-theoretical position that critiques positivism, arguing that reality exists in the human mind and is an individual's creation. Post-positivism, a research paradigm developed in the 1960s and 1970s, emerged as a critical alternative to positivism, influenced by Karl Popper's critique of logical positivism. It rejects the idea that science should only investigate certain aspects of the world and that all theories are subject to revision. Post-positivism considers research to be "soft" and uses small samples for in-depth studies. Design research shares similarities with cognitive psychology or sociology, making it a social process. Post-positivism emphasizes critical realism, subjectivity, and a mixed methods approach (Wenjuan, 2007).

It acknowledges that our perceptions and interpretations shape our understanding of reality and seeks to understand the deeper structures and mechanisms that underlie observable phenomena. Researchers practice reflexivity by critically analyzing their own contributions and considering alternative viewpoints. Pragmatism is a key aspect of post-positivism, urging researchers to be adaptable and open-minded. Phenomenological research, ethnographic research, and action research are methods used to study and understand the complexity of reality, providing an insider's view of a community and helping researchers create workable solutions to academic and organizational issues(Conjointly,2025).

Post-positivism is a philosophical approach the **ontology** posits that objective reality exists but is imperfectly knowable. It emphasizes the falsification of theories and acknowledges the subjective nature of researcher values and beliefs. The **epistemology** of post-positivism is objective but partial, with the focus on falsifying theories rather than verifying their truth. Researchers are seen as data collection instruments, acknowledging their perspectives are incomplete. The **axiology** of post-positivism acknowledges the influence of subjective values and aims to maintain a neutral stance to minimize their impact on the pursuit of objective knowledge (Testbook, 2024).

Interpretivism:

Interpretivism, originating in the 18th century, philosopher Giambattista Vico, who opposed Descartes, argues for a distinction between the natural and social world, focusing on subjective experiences and social constructions. Interpretivism, is a research paradigm that emphasizes the subjective nature of reality and the importance of understanding it through individual perspectives. It contrasts with positivism, which values positivism and focuses on power dynamics and societal structures. Interpretivists believe that individuals are experts in their own experiences and that context shapes interpretations. Researchers are

seen as interpreters of meanings, rather than co-creators of knowledge, promoting reflection and understanding (Lincoln & Guba, 2016).

Interpretivism is a research paradigm that views reality as socially constructed, meaning it is subjective and constructed by the observer through their experience. It typically involves qualitative methodologies like interviews, observations, and textual analysis to understand the meanings and interpretations people assign to their experiences. This approach is often used to explore complex social phenomena and individual perspectives, which are more subjective and nuanced. For example, to understand the experiences of individuals with chronic pain, an interpretivist approach would involve in-depth interviews, thematic analysis, and thematic analysis to identify recurring themes and patterns ((DTech, 2023).

The interpretive paradigm focuses on observation, interpretation, and contextual analysis of phenomena, avoiding predefined variables and prioritizing subjective human experience. It prioritizes rich research contexts over positivism and uses individuals' words as evidence. Interpretive researchers use qualitative methods to explore social realities, viewing reality as subjective and socially constructed. Findings are reported descriptively and naturalistic, studying real-world situations (Guba & Lincoln, 1989).

Interpretive research is a paradigm posits that reality is socially constructed and multiple subjective realities exist. Cultural relativism: This theory contends that people's perceptions of the world are influenced by cultural norms, values, and beliefs. It makes the supposition that knowledge is culturally relative and that there is no one correct way to understand the world. It emphasizes **ontology**, which views reality as a complex product of human experience and social interaction, and epistemology, which asserts that knowledge is gained through researcher interaction and understanding of participants' subjective meanings and experiences. This approach favors qualitative methods like interviews and ethnography to capture nuanced perspectives. **Axiology** acknowledges that values and biases are inherent in the research process and should be transparently declared. The researcher's role is to be self-aware and declare their position within the research (Shrestha, 2024).

Constructivism:

Constructivism is a theory of research and learning developed by Jean Piaget (1896–1980) and Lev Vygotsky (1896–1934) pioneered cognitive constructivism, and Lev Vygotsky (1896–1934), who developed social constructivism. In the early 20th century, Piaget focused on individual cognitive development and meaning-making through experience, while Vygotsky emphasized social interaction and cultural context. While the 1980s saw the theory's formal development and widespread popularity in education, its philosophical

and psychological roots extend much earlier in the 20th century. The theory's core principles include active learning, prior knowledge, social interaction, and a learner-centered environment. Its philosophical and psychological roots extend back to the 20th century, with other scholars building upon Vygotsky's ideas (David, 2018).

Constructivism is a philosophical paradigm that emphasizes the active construction of one's own notions of reality through cognition, leading to multiple realities. Researchers in this paradigm focus on participants' experiences and the co-construction of knowledge between researcher and participant. They recognize that they cannot be separated from the research process and see this as a positive influence. Constructivism is often associated with qualitative research, emphasizing inductive methods and limiting research to a small number of information-rich cases. For example, Strayhorn (2015) studied Black men's readiness for careers in science, technology, engineering, or mathematics, using online surveys and individual interviews. Smeda et al. (2014) applied constructivist learning principles in a multi-site case study in Australia, finding that digital storytelling supported constructivist approaches to learning (Steffe, & Jerry. 2012).

Constructivism's ontological position holds that reality is not a single, objective truth that exists outside of the mind, but rather is subjective and contextual, influenced by social construction and human interpretation. Constructivism's central **epistemological** tenet is that knowledge is actively created via a person's experiences and interactions with their surroundings, as opposed to passively absorbing information.

Constructivism **axiology**, recognizes that the researcher's personal values and biases invariably impact the research process and the knowledge that is produced, within the larger philosophical framework of axiology (the study of values). It is not necessary to separate these values from the "truth" that is being created. Constructivism in axiology recognizes that a researcher's values and biases affect both the research process and the resultant knowledge.

The conflict of values, which frequently overshadows scientific evidence, is the last element in public scientific disputes. Opposing parties usually hold different values related to ethics and fairness that drive the ongoing conflict, despite the belief that new findings can change entrenched views, as demonstrated in the long-standing fluoridation debate. This shows that constructivism has not had a major impact on the viewpoints of those involved, suggesting that the persistence of these disputes is more about underlying beliefs about truth and authority than it is about the science itself (Martin, 2019).

Social Constructionism:

Social constructionism, introduced in 1966 by sociologists Peter L. Berger and Thomas Luckman, is a theory that posits that biological characteristics, such as gender, race, class, ability, and sexuality, are shaped by human interpretation and cultural contexts. This theory highlights how cultural categories, such as "men," "women," "black," and "white," are created, changed, and reproduced through historical processes within institutions and culture. Social constructionism emphasizes that identity categories are not based on strict biological characteristics but on social perceptions and meanings. Categories are not "natural" or fixed, and their boundaries are constantly contested and redefined across different historical periods and societies. The social constructionist perspective is concerned with the meaning created through defining and categorizing groups of people, experience, and reality in cultural contexts (Vinney Cynthia, 2024).

According to social constructionism, ontology proposes a number of socially constructed realities, **epistemology** maintains that knowledge is acquired via a shared, empathic understanding of these realities and the researcher's interpretation of them, and **axiology acknowledges** that the researcher's values and biases are an essential part of the social construction process and cannot be divorced from the research. Various Socially Constructed Reality: According to social constructionism, there isn't a single, objective reality. Rather, reality is subjective and dynamic since it is established and preserved by mutual understandings, interactions, and agreements among social groups.

Pragmatism:

Pragmatism, a philosophical movement originating in the late 19th century, emphasizes the practical consequences of ideas and the importance of experience in determining truth and meaning. Key figures include Charles Sanders Peirce, William James, and John Dewey. Pragmatism challenges traditional metaphysical approaches, focusing on practical experience and its consequences. It views truth as useful and effective in guiding action, and values as important factors in determining what is worthwhile and meaningful (Kaushik, V. & Walsh, C.A.,2019).

Pragmatism is a research paradigm that focuses on the practicality and applicability of research findings, rather than a mutually exclusive philosophical position. This approach allows researchers to explore research aims that cross philosophical boundaries, using different perspectives for different aspects of the study. A pragmatic research paradigm often adopts a mixed-method approach, combining quantitative and qualitative methods depending on the research questions and context. For example, a researcher might investigate the effectiveness of a new teaching method in improving student learning outcomes using a mixed-methods approach, combining quantitative and qualitative data.

This approach allows for a holistic understanding of the teaching method's efficacy and practical implications, enabling researchers to understand not only the impact of the teaching method on test results but also on students (Biesta, Gert., 2010).

Pragmatism is a philosophical stance that emphasizes practical consequences and problem-solving, viewing reality as dynamic and shaped by experience. It views reality as a continuous process of becoming, embracing diverse methods and values. Pragmatist **epistemology** focuses on knowledge that is useful in real-world situations, while **axiology** acknowledges the influence of values and biases on research. This transparency is crucial for understanding the potential impact of values on findings (Handbook,2005).

Critical Realism:

Critical Realism, founded by Roy Bhaskar in the 1970s, argues for a stratified reality with knowable, underlying mechanisms. It emerged from his 1975 book, *A Realist Theory of Science*, and has been expanded by authors like Margaret Archer, Andrew Sayer, and Tony Lawson. Bhaskar's work laid the foundations for transcendental realism in science and social sciences. This philosophical method was created by Bhaskar to offer an alternative to constructivism and positivism. He argued for a stratified reality with knowable but not directly observable underlying mechanisms and structures.

Roy Bhaskar, the founder of Critical Realism (CR), argues that there are structures and mechanisms beyond empirical reality that are not knowable. Critical Realism is an elision of the phrases 'transcendental realism' and 'critical naturalism', suggesting affinities with Kant's philosophy but indicating differences from it. Bhaskar rejects empirical realism and deductivism, which suggests universal laws. Instead, CR proposes a process of a posteriori retrodution, rejecting the idea that laws can be deduced and predictions can be made from them. CR writers argue that deductivism and predictivism bear a close affinity with the empiricist conception of reality being constituted by experience ([Jefferies](#), 2011).

Critical Realism is a philosophical framework for social sciences that proposes a stratified reality consisting of the "real" (deep mechanisms), "actual" (events), and "empirical" (observations). It asserts a mind-independent reality, rejects the epistemic fallacy, and promotes human emancipation and flourishing by understanding and transforming social structures. Knowledge is fallible and dynamic, acquired through critical reflection on these structures. Critical Realism is committed to emancipation, social justice, and well-being, and encourages a holistic approach to research that focuses on the interconnectedness between humanity, social structures, and the natural world.

Ontology, epistemology, and axiology are key concepts in Critical Realism. Ontology posits reality as a stratified reality consisting of three layers: empirical, actual, and real. **Epistemology** focuses on the fallible and dynamic nature of human knowledge. Critical

Realism rejects the epistemic fallacy and emphasizes retrodution and emancipation. **Axiology** is committed to human emancipation, social justice, and well-being. Social transformation can be achieved by understanding deeper structures and mechanisms. A holistic approach promotes collective flourishing (Zhang, 2022).

The Most Common Research Paradigms

Table 1 outlines the most commonly used research paradigms, including Positivism, Post-Positivism, Constructivism, Social Constructionism, Interpretivism, Pragmatism, and Critical Realism, with detailed descriptions and additional sources provided.

Table : Comparison of ontologies, epistemologies, and axiologies of common research paradigms:

1	Paradigm	Ontology	Epistemology	Axiology
	Positivism	Objective reality exists independently of human perception.	Knowledge is discovered through empirical observation and measurement.	Research should strive for objectivity and eliminate researcher bias.
2	Post-Positivism	An objective reality exists, but it can only be imperfectly understood	Knowledge is theory-laden and subject to revision through empirical testing.	Complete objectivity is unattainable, and researchers must be reflexive about biases.
3	Constructivism	Reality is subjective, constructed by individuals through personal experiences.	Knowledge is socially co-constructed by individuals based on their experiences and interactions.	Values influence knowledge construction. Subjectivity is embraced and reflexivity is encouraged.
4	Social Constructionism	Reality is subjective, constructed through collective human interaction and cultural norms.	Knowledge is constructed through social processes, discourse, and cultural contexts.	Social factors and power dynamics play a role in shaping knowledge. Subjectivity is embraced and

				reflexivity is encouraged.
5	Interpretivism	Reality is subjective and can only be partially known through individual interpretations.	Knowledge is gained by understanding the meanings individuals attach to their experiences.	Values are central to interpretation. Reflexivity is encouraged with the aim of privileging participants' perspectives and context.
6	Pragmatism	Reality is ever-changing and shaped by experiences and practical outcomes.	Knowledge is judged by its usefulness and the outcomes it produces.	Values are important in shaping research goals, focusing on practical solutions and real-world impact.
7	Critical Realism	An objective reality exists, but it is layered and composed of observable events and hidden structures.	Knowledge is gained by understanding both observable events and their underlying mechanisms.	Researchers acknowledge the role of values. Researchers must be reflexive about biases.

Source : Pretorius, Lynette (2024) .

The Qualitative Report 2024 Volume 29, Number 10, 2698-2715

<https://doi.org/10.46743/2160-3715/2024.7632>

Demystifying Research Paradigms:

Navigating Ontology, Epistemology, and Axiology in Research

The Qualitative Report 2024 Volume 29, Number 10, 2698-2715

<https://doi.org/10.46743/2160-3715/2024.7632>

Demystifying Research Paradigms:

Navigating Ontology, Epistemology, and Axiology in Research

Application

Research paradigms and philosophies are essential for conducting research, guiding researchers in understanding reality and knowledge acquisition. Research paradigms and philosophies guide research, influencing questions, methods, and interpretation. They encompass a researcher's beliefs about the nature of reality (ontology), how knowledge is acquired (epistemology), and nature of value (axiology) the appropriate methods for gathering and analyzing data. Key paradigms include positivism, interpretivism/constructivism, pragmatics, and critical theory. Positivism assumes an objective reality, interpretivism/constructivism emphasizes subjective reality, pragmatics focuses on practical solutions, and critical theory addresses social justice and power dynamics. Understanding these paradigms influences research design, interpretation of findings, rigor and validity, and facilitates communication and collaboration among researchers. They provide a roadmap for conducting research, ensuring a clear understanding of reality and knowledge acquisition. Research philosophy is often overlooked or confused by students when starting academic research. However, understanding its philosophical underpinnings is crucial for developing a research methodology.

Research questions are framed by the researcher's adopted paradigm. In positivism, they aim to test hypotheses and establish causal relationships, while constructivist and interpretivist approaches focus on exploring meanings and experiences in context. Methodologies vary accordingly: positivists favor structured quantitative methods, whereas constructivists and interpretivists opt for qualitative techniques to understand lived experiences. Pragmatism encourages a mixed-methods approach based on problem-solving needs. Data collection and analysis are also paradigm-dependent, with positivism emphasizing objectivity and neutrality, while constructivists reflect on subjective influences, and critical realism seeks to uncover underlying social mechanisms. Findings presentation varies from statistical analysis in positivism to narrative accounts in constructivism and actionable insights in pragmatism.

A research paradigm is a theoretical framework that defines the nature of reality and how knowledge can be understood. It is based on ontology, epistemology, and axiology. Ontology refers to the nature of reality, while epistemology deals with the nature of knowledge and how we come to know something. Axiology deals with what is valued in research and how our own perspectives and values can shape the ways our research is designed and findings are interpreted. Some common research paradigms include positivism, post-positivism, constructivism, interpretivism, pragmatism, and critical realism. Positivism is grounded in the belief that reality is singular and can be objectively observed and quantified, while post-positivism is closely related but has a different

axiology. Constructivism emphasizes the subjective nature of reality and its construction through social interactions. Interpretivism focuses on understanding the subjective meanings and interpretations of participants' experiences. Pragmatism is flexible and encourages an integrative approach to values, blending both subjective and objective perspectives. Critical realism believes that an objective reality exists but is layered, consisting of different levels that are not always observable.

Conclusions:

Research paradigms and philosophies are crucial for understanding reality and knowledge acquisition. They guide research design, interpretation, rigor, and validity. Key paradigms include positivism, interpretivism/constructivism, pragmatics, and critical theory. Positivism assumes an objective reality, interpretivism/constructivism emphasizes subjective reality, pragmatics focuses on practical solutions, and critical theory addresses social justice and power dynamics. Understanding these paradigms influences research design, interpretation, rigor, and validity. Common paradigms include positivism, post-positivism, constructivism, interpretivism, pragmatism, and critical realism. Understanding and choosing a research paradigm shapes the entire research process, from framing questions to deciding on methods and interpreting results. By consciously choosing a research paradigm, researchers ensure their work is coherent, meaningful, and aligned with their philosophical perspectives on reality, knowledge, and values.

References

- Biesta, Gert (2010). Pragmatism and the philosophical foundations of mixed methods research. In *Handbook of Mixed Methods in Social and Behavioral Research*, 2nd ed. Edited by Abbas Tashakkori and Charles Teddlie. Thousand Oaks: Sage, pp. 95–117. [Google Scholar].
- Conjointly (2025). Positivism & Post-Positivism - Research Methods . William M.K. Trochim; © 2025 Analytics Simplified Pty Ltd, Sydney, Australia. ABN 56 616 169 021 ; <https://conjointly.com> > positivism-and-post-positivism.
- David F. Bjorklund. (2018). "A Metatheory for Cognitive Development (or "Piaget is Dead "). (Revisited) *ChildDevelopment*. **89** (6): 22882302. doi:10.1111/cdev.13019. PMID 29336015. Archived from the original on 14 August 2021. Retrieved 14 August 2021.
- Derek Jansen & Eunice Rautenbach (DTech) (2023). Research Philosophy & Paradigms. Grad Coach. <https://gradcoach.com> > research-philosophy.
- Edelheim, J.R. (2014) Ontological, epistemological and axiological issues. In: Dredge, D., Airey, D. & Gross, M.J. eds. *The Routledge Handbook of tourism and hospitality education*. Routledge.
- Guba, E., & Lincoln, Y. (1989). What is this constructivist paradigm anyway? In fourth generation evaluation. London: Sage .

- Handbook, Research Methods (2005) Positivism/Post Positivism –Oklahoma State University ; <https://open.library.okstate.edu> > chapter > positivism-p.
- Jefferies, William (2011).Critical Realism -An Empirical Realist Critique. ResearchGate <https://www.researchgate.net> > ... > Critical Realism
- Lincoln, Y. S., & Guba, E. G. (2016). The constructivist credo. Routledge. <https://doi.org/10.4324/9781315418810> .
- Martin, Brian (2019). Constructivism Versus Clear Thinking? <https://social.epistemology.com/2019/11/12/constructivism-versus-clear-thinking-brian> artin/#:~:text=The%20idea%20that%20money%20and%20power%20can,seen%20as%20biased%2C%20selective%20or%20otherwise%20tainted.
- O’Gorman, K. and MacIntosh, R. (2015) *Research methods for business & management. A guide to writing your dissertation*. 2nd ed. Goodfellow Publishers Ltd, Oxford.
- Pretorius, Lynette (2024) Demystifying Research Paradigms: A Guide to Ontology, Epistemology, and Axiology. Studocu Global.<https://www.studocu.com>
- Park YS · (2020) The Positivism Paradigm of Research. *Academic Medicine* 95(5): p 690-694 ; DOI: 10.1097/ACM.0000000000003093.
- Reich Y.(1994). Layered models of research methodologies. *Artificial Intelligence for Engineering Design, Analysis and Manufacturing*, 8(4), pp.263-274.
- Saunders, M., Lewis, P. and Thornhill, A. (2015) *Research methods for business students*. 17th Ed. Pearson Education: Essex.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Harlow: Pearson Education Limited.
- Shrestha,B.K.(2024).Discerning the Distinctive Characteristics of Key Research Paradigms and their Constituents . DOI: <https://doi.org/10.3126/njmr.v7i2.68191>.
- Steffe, Leslie P.; Gale, Jerry (2012). *Constructivism in Education*. Oxon: Routledge. ISBN 978-1-136-47608-2.
- ScienceDirect.com Constructivism - an overview. <https://www.sciencedirect.com> > topics > social-sciences.
- Somekh, B., & Lewin, C. (2005). *Research methods in the social sciences*. London : SAGE.
- Study Smarter UK(2022). Positivism: Definition, Theory & Research - Sociology <https://www.studysmarter.co.uk> > theories-and-methods.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social and behavioral research*. . Thousand Oaks: Sage.
- Testbook (2024). Positivism and Post Positivistic Approach of Research. <https://testbook.com> > UGC NET Paper 1 Notes.
- Vinney Cynthia (2024).Social Constructionism Definition and Examples. Thought Co <https://www.thoughtco.com> > ... > Psychology
- Vibha Kaushik & Christine A. Walsh(2019). Pragmatism as a Research Paradigm and Its Implications for Social Work Research.
- Wenjuan ,w· (2007). A post-positivism view of function behaviour; the design society :<https://www.designsociety.org> .
- Zhang, Tong (2022). Critical Realism: A Critical Evaluation. Taylor & Francis Online: Peer-reviewed Journals. <https://www.tandfonline.com> > Volume 37, Issue 1 <https://doi.org/10.1080/02691728.2022.2080127> .