



THE RESEARCH ONION MODEL: A CRITICAL REVIEW OF PHILOSOPHICAL FOUNDATIONS, METHODOLOGICAL CHOICES, AND CONTEMPORARY APPLICATIONS IN SOCIAL SCIENCE RESEARCH

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ABSTRACT

The increasing complexity of contemporary research problems has intensified the need for robust methodological frameworks that guide researchers in designing coherent, rigorous, and transparent studies. Among these frameworks, the Research Onion Model developed by Saunders, Lewis, and Thornhill has gained widespread recognition across social science research. Despite its extensive adoption, persistent confusion remains regarding the philosophical assumptions, methodological choices, and practical applications embedded within the model. This study critically reviewed the Research Onion Model to examine its theoretical foundations, evaluate its strengths and limitations, assess the suitability of its methodological options across different research contexts, and explore its contemporary relevance in light of emerging methodological developments. The study employed a qualitative literature review approach, synthesizing evidence from contemporary methodological scholarship on research philosophies, methodological choices, mixed-methods research, pragmatism, and critical realism. The analysis focused on the six layers of the Research Onion. The findings indicate that the Research Onion remains a valuable framework for promoting methodological coherence by linking philosophical assumptions to research design decisions. The review highlights the growing prominence of pragmatism, critical realism, methodological pluralism, and mixed-methods research, which challenge traditional linear interpretations of the model and support more flexible and iterative approaches to research design. The study concludes that the Research Onion continues to provide a relevant and effective framework for contemporary research but requires adaptation to accommodate interdisciplinary inquiry, digital research methodologies, and evolving methodological practices. It recommends greater emphasis on philosophical justification, methodological flexibility, and the integration of emerging research approaches to enhance methodological rigor and relevance in increasingly complex research environments.

KEYWORDS: Research Onion Model, Research Methodology, Contemporary Research Methods, Research Philosophy, Methodological Frameworks.

1. INTRODUCTION

1.1 Background

Research methodology provides the intellectual foundation upon which scientific inquiry is constructed. It determines how knowledge is generated, interpreted, validated, and communicated within a scholarly discipline. In contemporary research environments, methodological rigor extends beyond the selection of data collection techniques and encompasses the alignment of philosophical assumptions, research questions, theoretical frameworks, and analytical procedures. Consequently, researchers are increasingly expected to provide transparent justification for methodological decisions throughout the research process because methodological transparency is widely regarded as a hallmark of research quality and credibility (Creswell & Creswell, 2018; Saunders & Bristow, 2023).

The growing complexity of interdisciplinary research has increased the importance of methodological frameworks that assist researchers in making coherent research design decisions. Among the most influential of these frameworks is the Research Onion Model developed by Saunders, Lewis, and Thornhill (2019). The model conceptualizes research design as a sequence

of interconnected layers that guide researchers from broad philosophical assumptions toward specific data collection and analysis techniques. By encouraging systematic consideration of methodological choices, the framework promotes consistency, transparency, and logical alignment among all components of a research study (Saunders et al., 2019).

Although the Research Onion Model is widely used in postgraduate research and methodological education, its application is often limited to descriptive explanations of methodological choices rather than critical engagement with the assumptions underlying each layer. Researchers frequently identify a philosophical stance, research strategy, and method of data collection without sufficiently justifying how these decisions relate to one another. Such superficial applications can weaken methodological coherence and reduce the explanatory power of research findings. Recent developments in mixed-methods research, critical realism, and methodological pluralism have generated renewed interest in evaluating the continuing relevance of the framework in contemporary research contexts (Hampson & McKinley, 2023; Imran, 2024).



Furthermore, emerging interdisciplinary research increasingly challenges the rigid separation of methodological traditions that historically characterized quantitative and qualitative inquiry. Scholars advocating pragmatic and critical realist perspectives argue that contemporary research problems often require methodological integration rather than strict adherence to philosophical boundaries (Arias, 2024; Heeks et al., 2024). These developments raise important questions regarding the adaptability of the Research Onion Model and its capacity to accommodate emerging forms of inquiry.

This article therefore seeks to critically unpack the Research Onion Model by examining each layer in detail and evaluating its relevance within contemporary research practice. Rather than merely describing the framework, the paper synthesizes recent methodological debates, identifies areas of convergence and divergence within the literature, and explores how the model may be adapted to support emerging forms of inquiry. In doing so, the article contributes to methodological scholarship by providing a comprehensive and critical examination of one of the most influential research design frameworks currently used in social science research (Saunders & Bristow, 2023).

1.2 Research Problem

The increasing sophistication of research methodologies has created significant challenges for researchers, particularly postgraduate students and early-career academics, who must navigate a growing range of philosophical positions, methodological traditions, and analytical techniques. While numerous methodological frameworks exist to support research design, many researchers continue to struggle with aligning philosophical assumptions, research objectives, methodological choices, and analytical procedures. Such misalignment often results in methodological inconsistencies that undermine the validity, credibility, and trustworthiness of research findings (Creswell & Creswell, 2018; Saunders et al., 2019).

A recurring concern within methodological scholarship is that researchers frequently focus on data collection techniques while neglecting the philosophical assumptions that underpin their methodological choices. This tendency may result in situations where research questions, methods, and analytical procedures are not conceptually aligned. For example, studies that seek to understand subjective experiences may rely exclusively on quantitative techniques that are better suited to objective measurement than interpretive understanding. Such inconsistencies compromise methodological rigor and may limit the explanatory value of research outcomes (Mustofa, 2023).

The Research Onion Model was developed specifically to address these challenges by providing a structured pathway through methodological decision-making. However, despite its popularity, the model is often applied mechanistically rather than critically. Researchers frequently identify layers of the onion without adequately explaining why a particular philosophical position, research strategy, or methodological choice is appropriate for their study. As a result, methodological decisions

may appear disconnected from the research problem being investigated (Saunders & Bristow, 2023).

A further challenge concerns the evolution of methodological thought since the development of the Research Onion. Recent scholarship increasingly emphasizes pragmatism, critical realism, methodological pluralism, and interdisciplinary inquiry as alternatives to rigid methodological categorization. Consequently, questions emerge regarding whether the traditional layers of the Research Onion remain sufficient for addressing the complexities of contemporary research. The absence of comprehensive reviews that critically evaluate the model in light of these developments represents a significant gap within methodological literature (Heeks et al., 2024; Imran, 2024).

Accordingly, this article addresses the following central research question: How can the Research Onion Model be critically interpreted and applied to enhance methodological coherence and rigor in contemporary social science research?

1.3 Objectives of the Study

This article pursues several interrelated objectives.

- i) To provide a comprehensive explanation of the Research Onion Model and the theoretical assumptions underlying each layer.
- ii) To critically evaluate the strengths and limitations associated with different philosophical and methodological choices within the framework.
- iii) To examine the suitability of specific methodological options for different types of research problems and disciplinary contexts.
- iv) To synthesize contemporary methodological debates surrounding pragmatism, mixed methods, and critical realism to assess the ongoing relevance of the model.
- v) To propose recommendations for researchers seeking to apply the Research Onion in increasingly complex and interdisciplinary research environments.

2. METHODOLOGY

This study employed a conceptual and theoretical research design using a systematic integrative literature review to critically examine the Research Onion Model and its application in contemporary social science research. Consistent with conceptual research, the study synthesized existing scholarly knowledge rather than collecting primary data (Jaakkola, 2020). An integrative review approach was adopted because it enables the systematic inclusion and synthesis of theoretical, methodological, review, and empirical studies relevant to methodological frameworks (Snyder, 2019; Torraco, 2016). Guided by the question of how the Research Onion Model can enhance methodological coherence and rigor in contemporary social science research, the study was conducted from a pragmatic-critical realist perspective, combining critical realism's recognition of underlying methodological structures with pragmatism's emphasis on practical applicability (Heeks et al., 2024; Arias, 2024).

Following a PRISMA-informed screening process (Page et al., 2021), approximately 420 records were identified,



screened, and assessed for eligibility, resulting in 87 sources retained for analysis. Data extraction focused on philosophical assumptions, research approaches, methodological choices, research strategies, time horizons, data collection techniques, strengths, limitations, and emerging methodological developments. Thematic synthesis was employed to identify recurring patterns and conceptual relationships through coding, categorization, and theme development (Braun & Clarke, 2022). Source quality was assessed based on scholarly credibility, methodological rigor, conceptual clarity, citation influence, and relevance. Trustworthiness was enhanced through transparent procedures, explicit selection criteria, systematic screening, and triangulation across methodological textbooks, empirical studies, review articles, and conceptual papers (Snyder, 2019).

3. LITERATURE REVIEW

The Research Onion Model, developed by Mark Saunders and colleagues, provides a structured framework for making coherent methodological decisions in research. The model conceptualizes research design as a series of interconnected layers—research philosophy, theory development, methodological choices, research strategies, time horizons, and techniques and procedures—where decisions at outer layers influence those at inner layers (Saunders et al., 2019; Saunders & Bristow, 2023). Its popularity stems from its ability to simplify complex methodological concepts while linking philosophical assumptions to practical research methods. Although traditionally presented as a sequential framework, contemporary scholars argue that methodological decision-making is often iterative, particularly in qualitative and mixed-methods research, requiring researchers to revisit earlier assumptions as studies evolve (Hampson & McKinley, 2023; Tashakkori & Teddlie, 2021).

The outermost layer of the Research Onion is research philosophy, which shapes assumptions about reality (ontology), knowledge (epistemology), and the researcher's role. Four major philosophical paradigms are commonly associated with the model. Positivism assumes an objective reality that can be measured through observation and statistical analysis, making it suitable for quantitative studies focused on hypothesis testing, prediction, and generalization. While positivism promotes reliability and replicability, critics argue that it may oversimplify complex social phenomena by reducing human experiences to measurable variables (Creswell & Creswell, 2018; Mustofa, 2023). In contrast, interpretivism views reality as socially constructed and emphasizes understanding participants' meanings, experiences, and perspectives. Commonly associated with qualitative methods such as interviews and ethnography, interpretivism provides rich contextual insights but may face limitations regarding generalizability and researcher subjectivity (Denzin & Lincoln, 2018; Guba & Lincoln, 2020). Realism, particularly critical realism, bridges positivism and interpretivism by acknowledging an objective reality while recognizing that knowledge of it is socially mediated. This perspective seeks to uncover underlying causal mechanisms behind observable phenomena and supports both qualitative and quantitative methods (Bhaskar, 2008; Heeks et al., 2024). Pragmatism differs

from other paradigms by prioritizing practical problem-solving over philosophical allegiance. It encourages selecting methods based on their effectiveness in addressing research questions and is widely regarded as the philosophical foundation of mixed-methods research (Arias, 2024; Morgan, 2020).

A critical comparison of these philosophies reveals that none is universally superior; rather, each is appropriate under specific research conditions. Positivism and interpretivism represent contrasting views of reality and knowledge, while realism attempts to integrate objective structures and subjective experiences. Pragmatism emphasizes methodological flexibility and practical outcomes, though critics caution that excessive flexibility may undermine philosophical coherence if methodological decisions are not adequately justified (Hampson & McKinley, 2023).

The second layer of the Research Onion concerns approaches to theory development, namely deduction, induction, and abduction. Deduction moves from theory to observation, testing hypotheses derived from existing theories through empirical data. It is commonly associated with positivist research and offers rigor, structure, and generalizability but may restrict the discovery of new insights (Creswell & Creswell, 2018; Bryman, 2016). Induction operates in the opposite direction, generating theories from patterns emerging within empirical data. Frequently employed in qualitative research, induction encourages discovery and innovation but may lack theoretical direction and broader applicability (Charmaz, 2014). Abduction combines both approaches by iteratively moving between data and theory to explain unexpected findings. Increasingly popular in interdisciplinary and mixed-methods research, abduction facilitates theory refinement but requires careful documentation to ensure transparency and rigor (Timmermans & Tavory, 2022).

The third layer addresses methodological choices, including mono-method, multi-method, and mixed-methods designs. Mono-method research employs a single methodological tradition, either quantitative or qualitative, providing coherence and simplicity but potentially offering only a partial understanding of complex phenomena (Saunders & Bristow, 2023). Multi-method research uses multiple methods within the same methodological tradition, such as combining interviews, focus groups, and document analysis in qualitative research, thereby enhancing triangulation and validity (Denzin & Lincoln, 2018). Mixed-methods research integrates qualitative and quantitative approaches within a single study, combining statistical rigor with contextual depth. Contemporary methodological literature highlights growing support for mixed methods because complex social, organizational, and technological problems increasingly require multiple forms of evidence (Tashakkori & Teddlie, 2021; Heeks et al., 2024).

The fourth layer comprises research strategies, which represent the practical plans through which investigations are conducted. Common strategies include surveys, experiments, case studies, ethnography, grounded theory, action research, and archival research. Surveys and experiments are frequently associated with positivist and deductive studies due to their emphasis on measurement, control, and hypothesis testing. Case



studies facilitate in-depth exploration of contemporary phenomena within real-life contexts and are particularly useful for addressing “how” and “why” questions (Yin, 2018). Ethnography emphasizes immersion in social settings to understand cultural meanings and practices, whereas grounded theory focuses on generating theory directly from data through iterative analysis (Charmaz, 2014). Action research combines inquiry with intervention to solve practical problems collaboratively, while archival research utilizes existing records and documents to examine historical or organizational developments (Reason & Bradbury, 2022; Saunders et al., 2019).

The fifth layer concerns time horizons, referring to the temporal dimension of research design. Cross-sectional studies collect data at a single point in time and are commonly used for descriptive and explanatory purposes because they are efficient and cost-effective. However, they are limited in their ability to assess change and causality. In contrast, longitudinal studies collect data repeatedly over extended periods, enabling researchers to examine trends, development, and causal mechanisms more effectively, although they require greater resources and long-term commitment (Creswell & Creswell, 2018; Saunders & Bristow, 2023).

At the core of the Research Onion are techniques and procedures, which involve data collection, sampling, measurement, and analysis. Quantitative techniques typically include surveys, experiments, structured observations, and statistical analyses such as regression and structural equation modelling. Qualitative techniques include interviews, focus groups, participant observation, ethnography, and thematic or narrative analysis (Creswell & Creswell, 2018; Denzin & Lincoln, 2018). Recent methodological developments have expanded this layer to include digital research tools such as online surveys, virtual ethnography, social media analytics, artificial intelligence-assisted coding, and computational text analysis, reflecting the evolving nature of contemporary research environments (Storey et al., 2024).

The Research Onion remains a valuable framework for methodological decision-making because it integrates philosophical assumptions, theory development, research strategies, and practical methods into a coherent structure. Contemporary scholarship emphasizes its flexibility and continued relevance, particularly when interpreted as a dynamic rather than rigidly sequential model capable of accommodating methodological pluralism, interdisciplinary inquiry, and digital research innovations.

4. FINDINGS AND RESULTS

4.1 The Research Onion as a Framework for Methodological Coherence

The review reveals that the Research Onion Model remains one of the most comprehensive frameworks for guiding methodological decision-making in contemporary research. Across the literature, scholars consistently emphasize that methodological rigor depends upon the alignment of philosophical assumptions, theoretical approaches, methodological choices, research strategies, and analytical

procedures (Saunders & Bristow, 2023; Creswell & Creswell, 2018). The model's layered structure enables researchers to understand how decisions made at one level influence decisions made at subsequent levels, thereby promoting methodological coherence.

A major finding of this review is that the Research Onion continues to serve as an effective pedagogical and methodological tool for novice and experienced researchers alike. Its systematic structure reduces methodological ambiguity by providing a logical pathway from philosophical assumptions to practical research implementation. This finding supports previous studies that identify the model as particularly valuable for postgraduate students and early-career researchers who often struggle to justify methodological choices within complex research environments (Saunders et al., 2019).

The review further reveals that the model remains highly adaptable across disciplines. Evidence from management, education, healthcare, information systems, and social science research demonstrates that the framework can accommodate diverse methodological traditions while maintaining conceptual consistency (Imran, 2024). This adaptability explains its continued prominence in methodological education and research practice.

However, findings also indicate that researchers frequently apply the model superficially. Many studies identify methodological layers without adequately explaining the philosophical reasoning connecting them. Such applications transform the Research Onion into a procedural checklist rather than a framework for critical methodological reflection. Consequently, the effectiveness of the model depends not merely on its adoption but on the depth of engagement researchers demonstrate when applying it (Saunders & Bristow, 2023).

4.2 Evolution of Research Philosophies

The review demonstrates significant evolution within the philosophical layer of the Research Onion. Historically, methodological debates were dominated by the positivist-interpretivist divide, with researchers often aligning themselves exclusively with one paradigm or the other (Guba & Lincoln, 2020). Contemporary scholarship, however, suggests a growing recognition that complex research problems frequently require methodological flexibility and philosophical pluralism.

Positivism continues to dominate fields emphasizing prediction, measurement, and causal explanation. Quantitative studies in business, economics, healthcare, and engineering frequently rely on positivist assumptions because of their capacity to generate statistically generalizable findings (Creswell & Creswell, 2018). Nevertheless, the review indicates increasing criticism of positivism's limited capacity to capture the contextual and subjective dimensions of human experience.

Interpretivism remains highly influential in qualitative research, particularly in studies exploring meaning, identity, culture, and lived experiences. The literature consistently highlights the value of interpretivist approaches for understanding complex social phenomena that cannot be adequately explained through objective measurement alone (Denzin & Lincoln, 2018).



Yet concerns regarding transferability and researcher subjectivity continue to generate debate.

A particularly notable finding concerns the growing prominence of realism and pragmatism. Critical realism has emerged as an increasingly influential paradigm because it enables researchers to investigate both observable phenomena and underlying causal mechanisms. Similarly, pragmatism has gained widespread acceptance as a philosophical foundation for mixed-methods research due to its emphasis on practical problem-solving and methodological flexibility (Heeks et al., 2024; Arias, 2024).

4.3 Increasing Importance of Methodological Integration

Another significant finding concerns the growing acceptance of methodological integration. The review indicates that contemporary research increasingly transcends traditional methodological boundaries. Researchers are progressively combining qualitative and quantitative approaches to address complex societal, organizational, technological, and environmental challenges (Tashakkori & Teddlie, 2021).

Mixed-methods research emerges as one of the most significant methodological developments within contemporary scholarship. Rather than viewing qualitative and quantitative methods as competing alternatives, mixed-methods researchers recognize their complementary strengths. Quantitative methods provide breadth, precision, and statistical rigor, whereas qualitative methods contribute contextual understanding, explanatory depth, and interpretive insight (Storey et al., 2024).

This trend has important implications for the Research Onion because it challenges the assumption that methodological decisions necessarily follow linear and mutually exclusive pathways. Instead, contemporary research increasingly demonstrates that methodological choices may be iterative, adaptive, and integrative. Such findings suggest that the Research Onion should be interpreted as a flexible decision-making framework rather than a rigid methodological sequence (Hampson & McKinley, 2023).

5. DISCUSSION

The findings affirm that the Research Onion remains a valuable framework for methodological decision-making by demonstrating the interconnectedness of research philosophy, theory development, methodological choices, research strategies, and data collection procedures, thereby promoting methodological coherence (Saunders & Bristow, 2023). The review highlights that positivism, interpretivism, realism, and pragmatism are founded on distinct philosophical assumptions that shape knowledge generation and validation (Aramide et al., 2023). However, contemporary scholarship increasingly advocates methodological pluralism and paradigm integration, recognizing that no single philosophical position is universally superior and that methodological choices should be guided by research objectives and contextual requirements rather than tradition or preference (Cameron, 2024; Mukumbang, 2021).

The findings further indicate that positivism, interpretivism, realism, and pragmatism each contribute unique

strengths, while mixed-methods research has gained prominence for its ability to integrate multiple forms of evidence. Effective methodological rigor depends on meaningful integration of qualitative and quantitative approaches rather than their simple combination (Fàbregues et al., 2024; Matović & Ovesni, 2023). Contemporary methodological discourse increasingly emphasizes pragmatism, critical realism, multimethod research, and methodological pluralism, reflecting a shift toward paradigm complementarity. Moreover, the Research Onion should be viewed as a dynamic and adaptive heuristic rather than a rigid linear framework, capable of supporting iterative and interdisciplinary research while accommodating emerging methodologies associated with artificial intelligence, big data analytics, digital ethnography, and other technology-enabled research approaches (Cameron, 2024; Dissanayake, 2023).

6. SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Summary of Findings

This study examined the Research Onion Model and its underlying theoretical assumptions, the strengths and limitations of major philosophical and methodological choices, the suitability of different methodological options across research contexts, and contemporary debates surrounding pragmatism, mixed methods, and critical realism. The findings confirm that the Research Onion remains a valuable framework for methodological decision-making because it promotes alignment between research philosophy, theory development, methodological choices, research strategies, and data collection methods. The review demonstrated that positivism, interpretivism, realism, and pragmatism are grounded in distinct ontological, epistemological, and axiological assumptions that shape how knowledge is generated and interpreted. However, contemporary methodological scholarship increasingly advocates philosophical flexibility, methodological pluralism, and paradigm integration rather than strict adherence to a single research paradigm. The study further revealed that positivism contributes objectivity and generalizability, interpretivism provides rich contextual understanding, realism facilitates the explanation of causal mechanisms, and pragmatism emphasizes practical problem-solving. Additionally, mixed-methods research has gained prominence due to its capacity to integrate the strengths of qualitative and quantitative approaches, with recent literature emphasizing meaningful methodological integration as a key indicator of rigor.

The review also found that methodological choices should be guided primarily by research objectives, disciplinary requirements, and contextual considerations rather than methodological preferences. Quantitative approaches are particularly appropriate for explanatory, predictive, and hypothesis-testing studies, whereas qualitative approaches are better suited to exploratory investigations focused on understanding meanings, experiences, and social interactions. Mixed-methods, critical realism, and other hybrid methodological approaches were identified as especially valuable for addressing complex and interdisciplinary research problems.



Furthermore, the findings highlight significant contemporary methodological developments, including the growing influence of pragmatism, critical realism, methodological pluralism, and iterative research design. These developments challenge traditional linear interpretations of the Research Onion and support a more adaptive and recursive understanding of methodological decision-making. Overall, the study concludes that the Research Onion remains highly relevant in contemporary research environments, provided it is applied as a flexible framework capable of accommodating emerging methodologies, technological innovations, and interdisciplinary forms of inquiry.

6.2 Conclusion

The Research Onion Model continues to provide a valuable and influential framework for structuring methodological decision-making in contemporary research. Its greatest strength lies in its capacity to promote methodological coherence by demonstrating how philosophical assumptions shape subsequent methodological and procedural choices. As such, the model remains an important tool for both research practice and methodological education across diverse disciplinary contexts.

However, the review also demonstrates that the contemporary research landscape has become increasingly complex, interdisciplinary, and methodologically diverse. The growing prominence of pragmatism, critical realism, and mixed-methods research reflects a shift away from rigid methodological boundaries toward more flexible and integrative approaches to knowledge generation. These developments challenge traditional linear interpretations of the Research Onion and suggest that methodological decision-making is often iterative, adaptive, and responsive to evolving research contexts.

Despite these challenges, the Research Onion remains highly relevant because of its conceptual flexibility and its ability to accommodate diverse methodological perspectives. Its continued usefulness, however, depends on researchers engaging critically with its philosophical foundations rather than treating it as a procedural checklist. The framework should therefore be understood as a guide for reflective methodological reasoning rather than a prescriptive sequence of research decisions. By embracing methodological pluralism while maintaining philosophical clarity and coherence, researchers can continue to use the Research Onion effectively in addressing contemporary research challenges.

6.2 Recommendations

Based on the findings of this review, several recommendations are proposed:

6.2.1 Theoretical Contributions

- The Research Onion should be conceptualized and applied as a dynamic and adaptive framework that accommodates iterative and evolving research processes rather than as a strictly linear model.
- Methodological scholarship should continue to explore how methodological pluralism can be achieved while

maintaining coherence between philosophical assumptions and methodological choices.

- Greater attention should be given to the theoretical contributions of pragmatism and critical realism as emerging paradigms that support interdisciplinary and complex research.

6.2.2 Methodological Implications

- Researchers should critically engage with the assumptions underpinning each layer of the Research Onion and provide explicit justification for methodological decisions.
- Methodological choices should be aligned with research objectives, theoretical frameworks, and philosophical positions rather than being driven by convenience or disciplinary tradition.
- Researchers should embrace methodological flexibility and consider mixed-methods approaches where they provide a more comprehensive understanding of the research problem.

6.2.3 Practical Implications

- Strengthen methodological training by integrating philosophical and technical research skills.
- Clearly justify philosophical and methodological choices to enhance rigor and credibility.
- Use Research Onion to improve methodological literacy among emerging researchers.
- Apply pragmatism, critical realism, and mixed methods to address complex interdisciplinary problems.

6.2.4 Suggestions for Future Research

Future research should evaluate the Research Onion's applicability in emerging fields, compare methodological paradigms across disciplines, explore adaptations for iterative digital research, and examine links among pragmatism, critical realism, and methodological integration.

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