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Review Article

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Critical Literature Review: A Theoretical Framework Based on Phenomenology and Critical Thinking

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Abstract

Though literature reviews are vital to research, the field suffers from conceptual ambiguity and a lack of standardized methodologies for conducting them. Critical literature reviews, which foreground in-depth and objective re-evaluation of existing research, are especially important to the advancement of knowledge. This approach requires reviewers to possess rigorous critical thinking skills and methods to ensure objective and impartial evaluations. Grounded in phenomenology as its theoretical foundation and critical thinking as its methodology, this article proposes an operational framework for conducting critical literature reviews. This framework encompasses key processes such as literature screening, the application of phenomenological methods, and the integration of review findings. Compared to traditional approaches, critical literature reviews can more effectively reveal the deeper implications of research literature, provide a more nuanced analysis of research problems, and contribute more significantly to knowledge innovation. This approach offers new perspectives and robust support for educational research, promoting its further development. The value of critical literature reviews becomes even more pronounced in the context of the rapid rise of generative artificial intelligence technologies. Critical literature reviews can help researchers break free from pre-existing assumptions and biases, develop accurate and insightful interpretations of research findings, and conduct well-founded critiques. This approach avoids arbitrariness and ensures objective evaluations, thereby enhancing the quality of educational research and promoting academic progress.

Keywords: Critical literature review; Critical thinking; Phenomenology; Descriptive phenomenology; Interpretive phenomenology; Artificial Intelligence Generated Content (AIGC)

Introduction

In the realm of academic research, activities such as lectures, scholarly writing, debates, and seminars provide vital platforms for intellectual exchange and critical engagement among scholars [1-4]. Maintaining rigorous research standards is paramount in academia, and the pursuit of strategies to enhance research quality remains a central concern. Within this context, the literature review

has garnered significant attention as a crucial tool for exploring research evidence and understanding advancements in a given field [5-7]. Reading and writing are fundamental academic tasks, and scholarly literature offers not merely a collection of facts but a rich tapestry of interpretations, meanings, and theoretical frameworks [8]. Therefore, engaging with literature necessitates not only



evaluating the veracity of factual claims but also critically assessing the underlying perspectives, interpretations, and implications.

However, there is a tendency within academia, especially in China, to adopt a descriptive approach to literature reviews, often neglecting critical engagement with the literature. This phenomenon is rooted in several factors. First, there is a strong emphasis on knowledge inheritance within the Chinese academic tradition, leading to a focus on systematically synthesizing prior research to establish a robust foundation of knowledge. Second, the potential for controversy associated with critical evaluation can lead scholars to avoid critique and favor a less contentious descriptive approach. This inclination towards uncritical reviews can have significant drawbacks, most notably a lack of innovation. Without in-depth critical analysis, it becomes challenging to uncover novel perspectives and research directions, hindering the advancement of knowledge.

The rapid rise of Artificial Intelligence Generated Content (AIGC) technologies has presented both opportunities and challenges for conducting critical literature reviews. While AIGC can assist in various tasks, such as information retrieval and analysis, it is crucial to recognize that AIGC cannot replace the critical thinking and domain expertise required for human-led critical evaluation. AIGC technologies are not yet capable of replicating the critical thinking and domain expertise required for human-led critical evaluation.

The rapid rise of Artificial Intelligence Generated Content (AIGC) technologies has further exacerbated the issue, as over-reliance on descriptive reviews and insufficient critical appraisal can lead to several adverse consequences. The quality of research may suffer, with outputs lacking depth and originality, resulting in a proliferation of homogenous and superficial works. The risk of academic misconduct also increases when scholars incorporate AIGC-generated content without proper scrutiny, potentially leading to plagiarism and inaccurate attribution. Most importantly, this trend stifles academic progress by inhibiting the development of new theories and methodologies.

The uncritical adoption of AIGC-generated content raises concerns about the erosion of critical thinking in academic research. Without careful evaluation and analysis, incorporating such content can undermine the rigor and innovation of scholarly work. In the long term, this could lead to stagnation in academic development, diminishing the vitality and creativity of research.

This study aims to address these challenges by exploring effective methods for conducting critical literature reviews. The goal is to empower researchers to transcend preconceived notions and biases, facilitating accurate and insightful interpretations of the literature's original meaning. By encouraging a return to "the essence of things," we hope to foster well-reasoned critiques, devoid of arbitrariness and unsupported assertions.

Role and Significance of Literature Review

Literature reviews are indispensable to academic research. They provide a comprehensive synthesis and appraisal of scholarly work within a specific field, offering valuable guidance for subsequent

research endeavours. This guidance can encompass various aspects of research design, including theoretical frameworks, methodological approaches, and the identification of research gaps [5,7]. Literature reviews can be embedded within broader conceptual or empirical studies or conducted as independent, stand-alone projects [9].

Within academic research, it's important to distinguish between a literature review and a critical literature review. When integrated into a larger study, a literature review primarily serves to establish the theoretical background, situating the research within the existing body of knowledge and elucidating key concepts and propositions. In this context, the literature review plays a supporting role, providing the intellectual foundation for the study. Conversely, when undertaken as an independent endeavour, the literature review becomes the central focus, offering an in-depth analysis of a specific field, its current state, its evolution, and potential future directions.

Regardless of its format, a literature review's primary function is not to generate new knowledge but to integrate existing knowledge and contribute to the development of new insights within a particular study or field. In contrast, a critical literature review undertakes a more evaluative and analytical approach. Hart [5] defines it as a process involving the careful selection and organization of relevant literature, coupled with a critical assessment of its validity to achieve a deeper understanding of the research topic. Knopf [6] emphasizes the importance of concisely summarizing existing findings while also evaluating the accuracy and completeness of current knowledge. Machi et al. [7] view a critical literature review as a process of written argumentation, requiring a comprehensive understanding of the research area and the construction of a logically rigorous argument to address the research problem effectively.

The essence of a critical literature review lies in its emphasis on in-depth understanding, objective evaluation, accurate synthesis, and the formulation of original perspectives. From the standpoint of innovation, a purely descriptive literature review, while valuable for knowledge integration, may not directly contribute to the creation of new knowledge. Critical literature reviews, with their focus on deep analysis and the development of unique viewpoints, are better positioned to identify gaps and limitations in existing research, thereby contributing to the advancement of knowledge.

However, it's crucial to note that AIGC technologies are not yet capable of replicating the critical thinking and domain expertise required for human-led critical evaluation. AIGC-generated content often remains at the level of superficial summaries, limiting its capacity to contribute meaningfully to academic innovation.

Critical Literature Review: Enhancing the Credibility of Research

Philosophical Foundations of Critique

The importance of critique in scholarly inquiry is well-established within the philosophy of science. A fundamental aspect of research involves the evaluation of knowledge claims to

determine their validity and contribution to a given field [10,11]. Critique is a central component of this evaluative process.

Critique is not simply the negation or refutation of existing research but rather a process of reasoned examination and assessment. It entails questioning, analysing, and testing established views, theories, and methods, with the ultimate aim of pursuing truth and advancing knowledge.

Kant [12] considered critique a form of reflection on the limits and potential of human reason, asserting that “all things must be criticized before reason.” Feuerbach [13] viewed critique as a process of “renunciation,” whereby old ideas are challenged and ultimately integrated into a higher level of understanding. Marxist thought further emphasized the practical dimension of critique, advocating for its role in not only exposing contradictions but also driving social change. The Frankfurt School integrated critique with social theory, arguing that it should focus on social structures and power dynamics to promote equity and justice [14].

For instance, within the field of education, the critical analysis of “educational equity” can be traced back to Plato’s Republic. Plato critiqued the unequal education system in Athenian society, arguing that education should be accessible to all, not just a privileged few. This critical analysis exposed the power relations and social structures underpinning educational equity, prompting reflection on the purpose and value of education.

In social science research, the spirit of critique aims to uncover the root causes of problems through persistent inquiry and the examination of existing interpretations in light of current realities. Furthermore, critique can facilitate the development of new interpretive frameworks and offer fresh perspectives on existing challenges, thus driving innovation in research.

Critique is a means to an end, a powerful tool in the pursuit of knowledge. Through reasoned questioning and critical analysis, we can refine existing research, challenge established ideas and generate new research directions. The ultimate goal is to attain deeper understanding, not simply to accumulate knowledge.

Literature reviews that merely summarize existing literature without critical engagement do not fully embody the spirit of critique. Dogmatically adhering to established evaluation criteria without genuine reflection can impede the acquisition of novel insights.

Purpose of a Critical Literature Review

While peer review processes are designed to ensure quality control in academic publishing, the reliability of published research can still be subject to scrutiny. As research progresses, limitations in earlier studies may be revealed. AIGC tools, due to algorithmic constraints and a lack of contextual understanding, may not accurately identify these limitations and could even disseminate misinformation, further impacting research reliability.

In quantitative research, the credibility of a study is often evaluated based on the margin of error, with smaller errors indicating higher credibility. In the natural sciences, error

reduction is often achieved by increasing sample sizes. However, in social science research, the factors influencing reliability are more complex, including the representativeness of the sample, the reliability of data collection methods, and the validity of the analytical approaches used.

According to Stratton [15], a critical literature review can be considered a type of narrative review, offering a comprehensive and evolving perspective on a research topic by systematically tracing the development of research perspectives over time. However, the critical literature review distinguishes itself through its specialized, in-depth reassessment of the literature, which imbues it with unique value.

A growing body of research indicates that critical literature reviews surpass traditional review methods in terms of analytical depth, the quality of conclusions drawn, and their capacity to inspire future research. For example, studies examining literature reviews in the field of educational technology have demonstrated that critical reviews are more effective at uncovering the deeper implications of the literature, providing a more nuanced analysis of research questions, and offering more valuable guidance for future research endeavours.

It is important to acknowledge the concern that critical literature reviews may devolve into unproductive criticism or fault-finding. This highlights the need for continuous refinement of the methodological framework and research paradigm for critical literature reviews.

Characteristics of a Critical Literature Review

By synthesizing various perspectives and drawing on practical experience, a critical literature review can be defined as a rigorous and systematic examination of research findings to assess their credibility, value, and relevance to specific research needs. Critical appraisal not only sheds light on the strengths, weaknesses, and potential biases of existing research but also enables reviewers to evaluate the validity, applicability, and significance of the foundations upon which new research is built.

Specifically, a critical literature review is characterized by the following key features:

- **Depth of Analysis:** It requires reviewers to employ critical thinking and insightful analysis to achieve a deep, phenomenological understanding of existing research.
- **Objectivity:** Reviewers must set aside preconceived notions and biases, going beyond individual phenomena to achieve a holistic understanding and ensuring that subjective preferences do not unduly influence the evaluation.
- **Comparative Perspective:** It emphasizes the comparative evaluation of research, highlighting the unique contributions and limitations of different studies.
- **Future Orientation:** It connects the critical analysis of existing literature to future research directions, guiding the development of new inquiries and knowledge.

Theoretical and Methodological Foundations of Critical Literature Review

The initial stages of a critical literature review often emerge from the reviewer's intellectual curiosity [7]. As the review progresses, the research question becomes more focused and refined, with a clear research theme gradually taking shape. This process of theme development is unique to critical literature reviews and presents a greater challenge compared to other types of reviews. The need to integrate findings from diverse research paradigms, including both discursive and empirical research, adds further complexity. Moreover, reviewers often rely on intuitive understanding (a form of direct, non-conceptual cognition, grasping the essence of a matter through direct perception of experience) to identify and refine research themes.

However, the process by which reviewers identify and refine their research themes can appear somewhat ambiguous and "artistic." While a well-defined theme provides direction and structure, it's essential to ensure that the review process remains objective, avoids personal biases, and considers all valuable arguments and evidence. This presents a key challenge in the development of critical literature reviews.

Phenomenology as a Theoretical Foundation

In academic research, there is a constant endeavour to mitigate cognitive biases and limitations. Identifying and analysing such biases in existing literature is crucial for driving scientific breakthroughs. As philosophers like Popper, Heidegger, and Gadamer have argued, bias is not merely an obstacle to knowledge but a precondition for its emergence [16-18]. Scientific inquiry aims to uncover the fundamental essence of phenomena, constructing a systematic framework for research and understanding while avoiding the pitfalls of fragmented observations and knowledge [19]. Phenomenology, pioneered by Edmund Husserl and his successors, offers a valuable perspective for this pursuit [20].

Since its inception in the 20th century, phenomenology has played a significant role in Western philosophy, providing a framework for critical reflection through the examination of consciousness and the processes by which humans construct their understanding of the world. Husserl envisioned phenomenology as a novel and unbiased approach to philosophical inquiry [16]. While subsequent interpretations and applications of phenomenology have evolved in various directions, its foundational principles remain highly influential.

The emphasis on "bracketing" or setting aside preconceived notions distinguishes phenomenology from other philosophical schools. This approach enables a more direct and unmediated examination of phenomena [19]. Phenomenology is characterized by its "intuitive" and "descriptive" methodology, eschewing causal reasoning, contextual interpretation, or discursive argumentation [16]. The evolution of phenomenology can be broadly categorized into three stages: Husserl's transcendental phenomenology, Heidegger's existential phenomenology, and Gadamer's

hermeneutic phenomenology, each with a distinct focus.

Phenomenology reminds researchers that human consciousness is situated and that the structure of experience should be considered when making assumptions about the external world [16]. This is because the essence of a phenomenon—the fundamental properties that constitute its existence—is revealed through the structure of experience. The phenomenological methods of "eidetic reduction" and "transcendental reduction" play a vital role in achieving objectivity in the description of experience [19].

In the context of critical literature reviews, adopting a phenomenological lens enables reviewers to bracket out unacknowledged presuppositions embedded in the literature. This facilitates the construction of an unbiased understanding of objective existence at the level of consciousness, bridging the gap between the objective and subjective realms.

Phenomenological research prioritizes experience (consciousness) and its underlying meaning, aiming to reveal the significance of that experience rather than arguing for a specific viewpoint or constructing abstract theories [21]. From a phenomenological perspective, the author of the original text is "absent" during the review process, allowing for a direct and in-depth engagement with the text itself. The principle of returning "to the things themselves" encourages reviewers to focus on the meaning embedded within the work, grasping its essence without being influenced by the author's identity or reputation.

Critical literature reviews, grounded in a phenomenological approach, prioritize the exploration of human experiences and their embedded meanings as conveyed through the literature. The ultimate goal is to achieve an intuitive and universal understanding, faithfully reconstructing the experiential process of the research participants through precise and vivid descriptions [22]. The core task of the reviewer is to reflect on and critique the experiences conveyed through the text. Only by achieving this depth of understanding can reviewers gain accurate insights into the study's actual contribution, conduct a comprehensive evaluation of its knowledge claims, and formulate relevant theoretical findings and research hypotheses.

By employing descriptive phenomenology and focusing on the level of perceived consciousness, reviewers can more effectively interpret the objective facts presented in the literature. Interpretive phenomenology, with its reflective and critical orientation, can help to identify weaknesses in previous research and suggest areas for improvement, contributing to knowledge innovation and development [23,24].

Critical Thinking as Methodology

To provide a more comprehensive understanding of the concept of "critical thinking," this study will draw upon the work of prominent scholars in the field. Paul Richard [25], a leading voice in critical thinking research, defines it as:

...a purposeful, self-regulatory judgment that leads to interpretation, analysis, evaluation, and inference, as well as explaining the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based.

This definition highlights the active and reflective nature of critical thinking, emphasizing its role in interpretation, analysis, evaluation, and inference. It also underscores the importance of grounding judgments in evidence, concepts, methods, and context.

Elder and Paul [25] further illuminate the concept by outlining its key characteristics, which include:

- **Intellectual autonomy:** Thinking independently and forming one's own judgments.
- **Intellectual integrity:** Holding oneself to the same rigorous standards of evidence and reasoning that one expects of others.
- **Intellectual humility:** Recognizing the limits of one's own knowledge and being open to learning from others.
- **Intellectual empathy:** Understanding and considering different perspectives, even when they conflict with one's own.
- **Intellectual perseverance:** Persisting in the face of intellectual challenges and not giving up easily on complex problems.
- **Confidence in reason:** Believing that the careful application of reason can lead to reliable knowledge and understanding.
- **Fairmindedness:** Treating all viewpoints with respect and impartiality, regardless of one's own biases or preferences.
- These characteristics, when applied to the context of literature review, enable reviewers to:
 - Screen literature sources with a discerning eye, evaluating their quality, relevance, and potential biases.
 - Analyse individual studies in depth, identifying their strengths, weaknesses, and underlying assumptions.
 - Integrate findings across studies in a thoughtful and nuanced manner, recognizing the complexities and contradictions that may exist.

By grounding the concept of critical thinking in the work of established scholars and explicitly connecting it to the process of literature review, this study aims to provide a clear and comprehensive framework for conducting critical literature reviews.

From a methodological perspective, this study draws on the practical aspects of critical thinking to provide guidance for the effective and rigorous critique of the insights derived from phenomenological analysis and reflection. Critical thinking encompasses key elements such as interpretation, analysis, evaluation, inference, explanation, and self-regulation [26].

The ability to ask probing questions is a crucial skill in critical thinking [27,28]. Critical thinking is characterized by autonomy,

logical reasoning, reflection, and open-mindedness [25]. These attributes enable reviewers to think independently, adhere to logical principles, scrutinize their own thinking, and remain receptive to diverse perspectives.

Reviewers must possess well-developed critical thinking skills, as extensive reading alone does not guarantee high-quality critical analysis. A mature critical process transcends purely instrumental reasoning and incorporates reflective practices to mitigate the influence of biases and ingrained assumptions. In this context, critique is not just an attitude but a scientific method, requiring reflection as a meta-method to support and guide the entire critical process.

Reviewers should utilize reflection to gain a deeper understanding of the research data, carefully analysing the language, argumentation logic, and contextual factors within the text. Throughout this process, a commitment to humanization should be maintained [27,28].

During the critical review process, reviewers engage in critical reading, actively drawing upon their diverse experiences and knowledge related to the topic. From this unique perspective, they leverage their understanding of everyday life, learning experiences, and professional expertise to construct a comprehensive evaluation, leading to a deeper understanding of the research.

Critical readers maintain a healthy scepticism, questioning and evaluating the arguments presented rather than passively accepting them. Through multiple readings, they scrutinize the author's discursive style and assess its potential impact, carefully evaluating the adequacy of the evidence and the soundness of the reasoning.

Unlike non-critical thinkers who may unconsciously accept the ideas of others, critical thinkers adopt a more active and challenging role. They base their judgments on evidence, avoid extreme positions, strive for objectivity, and actively seek balanced perspectives. They are adept at managing their personal feelings to avoid undue influence, ensuring that their judgments are well-considered and thoughtful [27,28].

While critical thinking has been successfully integrated into the field of academic writing research [28], its application to the critical review of multiple research articles remains less developed. Traditionally, reviewers have adopted a comparative approach, focusing on the similarities and differences between studies. However, this can sometimes lead to a neglect of critical analysis in favor of simple categorization, often relying on quantitative coding and inter-rater reliability measures. This approach can result in descriptions that are influenced by individual analysts' subjective interpretations, lacking a consistent and rigorous critical framework [29].

To address this, we propose that while respecting the independence of individual reviewers, critical literature reviews should incorporate both critical thinking and collaborative review processes. Achieving an objective and comprehensive understanding of a research field necessitates the collective effort

and insights of multiple reviewers. Collaborative critique allows for the transparency of individual perspectives, ensuring the reliability of the analysis and the generalizability of conclusions. This approach helps to mitigate the influence of any single perspective, ensuring that the research process remains objective and grounded in “reasonably criticized conclusions.”

An Operational Framework for Critical Literature Reviews

Grounded in phenomenological theory and employing critical thinking as its methodology, the critical literature review process involves the organized and systematic application of these principles by all participating reviewers. The goal is to facilitate the emergence of intuitive understandings and deep insights derived from the literature, effectively operationalizing the collective consciousness and awareness of the reviewers.

The critical literature review model proposed here focuses on a group of reviewers who share a common research interest. Through a carefully structured process of engaging with the literature, this model fosters critical understanding grounded in reflection. By utilizing the reflective lens of phenomenology [21] and adhering to the principle of returning “to the things themselves,” reviewers can deeply reflect on the meanings embedded within the literature,

scrutinize potential fallacies, clarify misunderstandings, and engage in constructive dialogue at the level of consciousness. This process aims to extract a profound understanding of the research essence.

Traditional literature review methods have established a relatively comprehensive operational process, typically involving the formulation of research questions, literature searches, the establishment of inclusion criteria, initial quality assessment, the review itself, and the integration of findings [29,30]. In ensuring the reliability of the review process, traditional approaches often prioritize high-quality studies while neglecting in-depth critical discussion.

This study proposes an operational framework for critical literature reviews that builds upon the strengths of traditional methods while incorporating a phenomenological approach in the initial review stage and leveraging critical thinking during the integrative review stage.

Recognizing that phenomenology enables the bracketing of presuppositions during the process of meaning-making, thus facilitating a focus on the research itself and promoting a deeper understanding of the research problem, this study draws on Colaizzi's [23] seven-step method for descriptive phenomenological analysis, which aligns with Husserl's transcendental phenomenology.

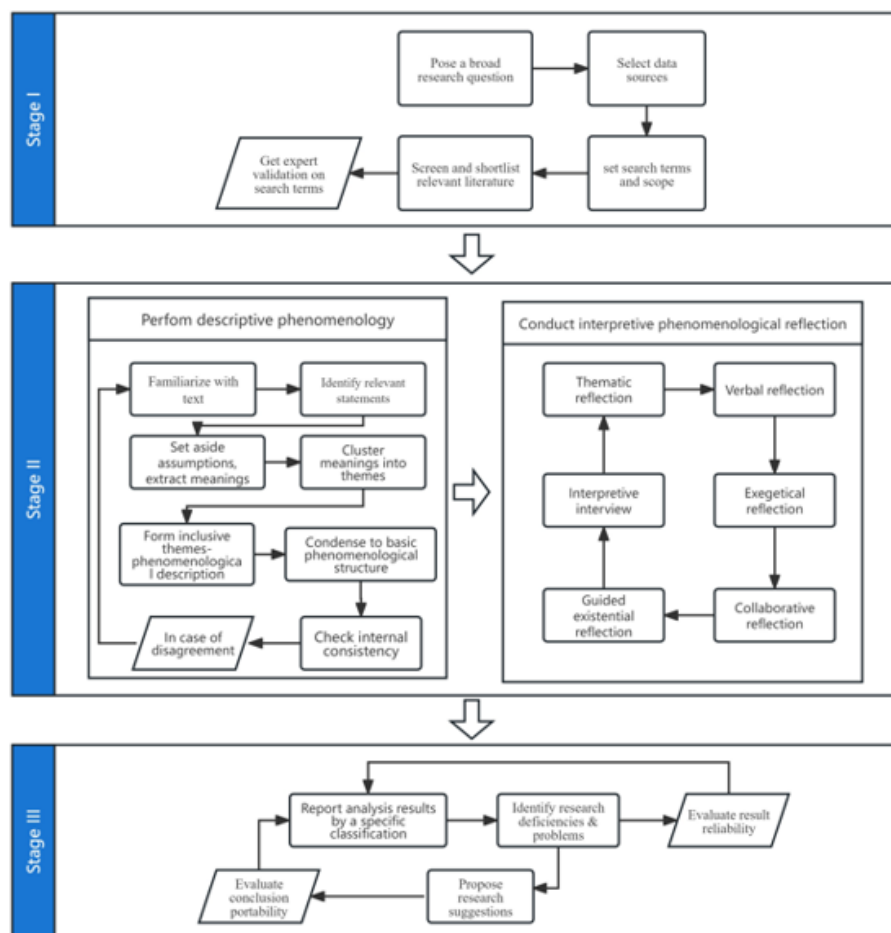


Figure 1: Operational Framework for a Critical Literature Review.

Furthermore, addressing Giorgi's [24] critique of Colaizzi's seventh step (which involves seeking consensus between the researcher's and the author's perspectives), this study modifies the seventh step to emphasize internal consistency within the reviewers' interpretations. This provides a more rigorous approach to the description of the research experience. In terms of interpretive phenomenological practices, this study draws on the work of Max Van Manen [22], integrating elements of Heidegger's existential phenomenology and Gadamer's hermeneutic phenomenology. This leads to the construction of a comprehensive operational framework for critical literature reviews, as depicted in Figure 1.

Stage 1: Literature Screening

This stage emphasizes a moderately broad selection of literature, mitigating the influence of subjective biases. The accuracy of search terms should be validated by consulting with experts to ensure the credibility of the final review. It's crucial to note that while AIGC tools can efficiently search vast quantities of literature, they may lack the capacity for nuanced selection based on the specific research question, potentially leading to the omission of important works or the inclusion of irrelevant ones.

Stage 2: Application of Phenomenological Methods

This stage employs both descriptive and interpretive phenomenological methods to facilitate the development of unique insights and deep understandings. Descriptive phenomenology is used to analyse the general structure and nature of the literature, drawing reliable conclusions through repeated readings, careful analysis, objective coding, the identification of themes, and internal consistency checks. Interpretive phenomenology deepens the understanding of the literature through various modes of reflection, including:

- Guided existential reflection: Exploring the structure of the human lifeworld and experiences in specific situations (e.g., space, time, relationships) to provide a broader perspective.
- Exegetical reflection: Deepening understanding by examining relevant historical data, cultural contexts, and background information.
- Collaborative reflection: Organizing discussions to integrate diverse viewpoints and promote in-depth analysis.

It's important to recognize that AIGC technologies are not yet capable of replicating the reflective and interpretive capacities of human reviewers. AIGC-generated analyses often rely on surface-level textual information, lacking the ability to uncover deeper meanings and engage with the human lifeworld embedded within the literature.

Stage 3: Integration of Results

In this stage, reviewers apply critical thinking to the understandings developed in the previous stages. This involves:

- Organized Reporting: Presenting the results of the analysis in a structured manner, categorized according to relevant themes.

- Comprehensive Description: Providing a detailed account of the findings, highlighting key insights and their implications.
- Identification of Limitations: Critically examining the shortcomings and limitations of the reviewed research to guide future research.
- Formulation of Recommendations: Offering research suggestions based on critical thinking and judgment, providing a clear direction for future inquiries.
- Assessment of Reliability: Evaluating the reliability and objectivity of the analysis to ensure the credibility of the conclusions.
- Ensuring Transferability: Assessing the generalizability of the findings and recommendations to ensure their applicability in diverse contexts.

It's important to acknowledge that AIGC tools are limited in their ability to perform these tasks. They lack the capacity for in-depth critical thinking, the formulation of original research recommendations, and the nuanced assessment of reliability and transferability that human reviewers can provide.

The Impact and Challenges of Generative AI

The advent of generative artificial intelligence (AIGC) technologies presents both exciting possibilities and significant challenges for conducting critical literature reviews. While AIGC can undoubtedly assist with various tasks, its limitations in replicating human critical thinking necessitate careful consideration and integration within a framework that prioritizes nuanced analysis and objective evaluation.

Potential Impacts of AIGC on Critical Literature Reviews:

- **Literature screening:** AIGC can accelerate the identification of potentially relevant sources. However, its reliance on algorithms and datasets may lead to the inclusion of biased or superficial works, hindering the pursuit of "the essence of things" that is central to phenomenological inquiry. Researchers must employ critical thinking to discern the quality and relevance of sources identified by AIGC.
- **Literature analysis:** AIGC can aid in summarizing factual information and identifying key terms. However, it falls short in capturing the deeper meaning embedded within the literature, a key objective of interpretive phenomenology. AIGC should be used to augment, not replace, the human capacity for critical analysis and reflection.
- **Literature integration:** AIGC may struggle to synthesize diverse perspectives and develop coherent arguments that transcend individual studies. Critical thinking remains essential for integrating findings, identifying limitations, and formulating original insights.

Challenges Posed by AIGC for Critical Literature Reviews:

- **Maintaining objectivity:** AIGC, trained on existing datasets,

may perpetuate biases present in those datasets. Researchers must be vigilant in identifying and bracketing these biases, ensuring that their critical evaluations remain grounded in the principles of phenomenology.

- **Cultivating critical thinking:** The ease of using AIGC to generate summaries and analyses may inadvertently diminish researchers' critical thinking skills. It is essential to actively engage with the literature, challenge assumptions, and formulate independent judgments, rather than passively accepting AIGC outputs.
- **Ensuring ethical conduct:** The use of AIGC in literature reviews raises ethical concerns, such as plagiarism and misrepresentation. Researchers must adhere to rigorous ethical standards and critically evaluate the validity and originality of AIGC-generated content.

Integrating AIGC into Critical Literature Reviews:

To effectively integrate AIGC into critical literature reviews, researchers should:

- **Employ AIGC as a supportive tool:** AIGC should be used to augment, not replace, human critical thinking and phenomenological inquiry.
- **Critically evaluate AIGC outputs:** Researchers must critically assess the validity, objectivity, and depth of AIGC-generated content.
- **Prioritize human reflection and analysis:** AIGC should not diminish the importance of human interpretation, critical evaluation, and the development of original insights.

By thoughtfully integrating AIGC within a framework that prioritizes critical thinking and phenomenological principles, researchers can harness its potential benefits while upholding the rigor and integrity of critical literature reviews.

Conclude and Future Directions

Conclusion

In the ongoing pursuit of academic advancement, the critical literature review, enriched by the insights of phenomenology and the rigor of critical thinking, emerges as a powerful tool for enhancing the credibility of research and fostering innovation. From a theoretical standpoint, the "bracketing" principle of phenomenology, combined with the multifaceted nature of critical thinking, injects fresh perspectives into the research process. This approach empowers reviewers to transcend cognitive limitations, delve into the essence of the literature, and unearth its potential value.

The operational framework presented in this study, encompassing the careful selection of literature, the nuanced application of phenomenological methods, and the precise integration of findings, provides a robust foundation for the practice of critical literature review. This framework ensures the rigor and objectivity of the review process.

Compared to traditional approaches, the critical literature review offers significant advantages. It promotes deeper analysis, enhances the quality of research conclusions, and provides valuable guidance for future research directions. However, it is essential to acknowledge the challenges posed by the rapid rise of generative artificial intelligence. While AIGC can efficiently process vast amounts of information, it often falls short in terms of critical engagement and insightful analysis. Over-reliance on AIGC can exacerbate the risks of stagnant academic thinking, increase the potential for misconduct, and undermine the foundations of rigorous scholarship.

Limitations and Future Directions

This study has several limitations that should be addressed in future research. First, while the proposed framework offers a comprehensive approach to critical literature review, it lacks empirical validation. Future studies should examine the effectiveness of this framework in practice, comparing it with traditional approaches and assessing its impact on the quality of research. Second, the study primarily focuses on the theoretical foundations of critical literature review, with limited discussion of practical implementation challenges. Further research is needed to provide more concrete guidance on how to apply this framework in various research contexts. Finally, the study's discussion of AIGC's impact on critical literature review, while insightful, remains largely speculative. Future research should empirically investigate how AIGC is being used in literature reviews and assess its potential benefits and challenges [31].

Looking ahead, the academic community must actively engage with and refine the practice of critical literature review. By harnessing its strengths and mitigating the potential negative influences of AIGC, we can enhance the quality of academic research. Through the power of critical literature review, we can overcome existing limitations, navigate the vast sea of knowledge, and propel the wheel of academic innovation forward. By embracing critical reflection and rigorous analysis, we can illuminate the path toward truth, reshape the academic landscape, and foster a culture of intellectual integrity and scholarly excellence.

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Conflict of Interest

No conflict of interest.

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