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Introducing the Rule of Five: A Guide to the Literature Review

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Abstract

This article proposes the Rule of Five, a practical and structured framework for organizing literature reviews across conceptual, theoretical, empirical, and methodological domains. Recognizing the confusion and fragmentation often experienced by students and early-career researchers, the Rule of Five proposes five core elements that should guide the review of each component of the literature in order to improve clarity, coherence, and analytical depth in academic writing. Each component is approached systematically. For conceptual reviews, the framework emphasizes historical evolution, conceptualization, dimensions, measurement, and critique. The theoretical review is guided by the theory's historical background, central propositions, underlying assumptions, relevance, and critique. Empirical literature is examined through the objective, scope, method, key findings, and critique. Methodological reviews are organized around philosophical foundations, theoretical foundations, procedural logic, analytical techniques, and critique. This article serves as a practical guide for students and researchers seeking to structure their literature reviews systematically, ensuring that key dimensions of academic inquiry are addressed consistently across diverse fields of study. The Rule is intended as both a pedagogical tool and a writing aid, offering a replicable structure that enhances the quality and clarity of literature reviews across disciplines. The article concludes with practical recommendations for applying the Rule of Five in academic writing, teaching, and research supervision.

Keywords: Conceptual Review, Empirical Review, Literature Review, Methodological Review, Rule of Five, Theoretical Review

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Introduction

As Isaac Newton once remarked, “If I have seen further than others, it is by standing on the shoulders of giants.” This timeless insight highlights the essential role that existing knowledge plays in the advancement of academic inquiry. Consulting the work of other scholars is not only acceptable—it is essential. In fact, the quality and credibility of a research work often depend on the breadth and depth of the existing literature it engages with. Most research builds on prior studies—though earlier work may have been conducted in different contexts, employed different methods, or addressed only part of the issue (Hart, 1998; Machi & McEvoy, 2016; Ridley, 2012). Thus, it is rare to find a topic that has not been explored in some form or entirely new; previous studies may have approached the subject from a different context, used alternative methods, or addressed only part of the issue.

The literature review is the section of a research report where prior studies are examined, synthesized, and integrated with the researcher’s own ideas. In academic writing, it serves as the intellectual backbone of any scholarly investigation. Far more than a summary of existing work, the literature review anchors the study in current knowledge, illuminates theoretical and conceptual frameworks, and highlights gaps in the empirical record that the new research aims to address (Leedy & Ormrod, 2021). It effectively positions the study within the academic discourse and provides a rationale for its direction.

However, many students and early-career researchers tend to underestimate or overlook the importance of the literature review, often treating it as a routine requirement rather than a critical component of scholarly writing. Many of them find the literature review challenging—either writing too little, too broadly, too descriptively or out of content and context. Another common pitfall is failing to clearly separate the conceptual, theoretical, and empirical dimensions of the literature. Difficulties often stem from their lack of understanding of how to properly review, evaluate, synthesize, and account for the diverse and valuable materials they consult. Yet, it is through a well-executed literature review that a researcher demonstrates awareness of the field, identifies knowledge gaps, and lays the groundwork for a meaningful contribution.

To address this gap, this article introduces the Rule of Five—a simple yet comprehensive guide that identifies five essential elements for each type of literature review. The Rule of Five is a guiding framework I propose for systematically organizing the conceptual, theoretical, empirical and methodological components of the literature review section of a research report, especially theses, dissertations, and journal articles. In conceptual reviews, the framework focuses on tracing the historical development of the concept, clarifying definitions, identifying dimensions, exploring

measurement approaches, and assessing relevance. Theoretical reviews are structured around the origin of the theory, its main propositions, foundational assumptions, applicability, and critical evaluation. Empirical reviews emphasize the study's aim, scope, method, major findings, and critical assessment. Methodological reviews are framed by examining the underlying philosophical and theoretical bases, the logical sequence or process of application, analytical tools used, and a critical appraisal of the method.

The Rule is not a rigid checklist, but a flexible framework designed to enhance the quality and analytical rigor of literature reviews across disciplines. By following this structured approach, researchers can ensure clarity, analytical depth, and coherence in presenting existing knowledge and framing their studies.

Understanding the Literature Review

The literature on a topic refers to the body of existing research, scholarly articles, and other published materials related to that topic. A literature review is the systematic, comprehensive, objective, and critical analysis of this body of work. The literature review goes beyond simply summarizing individual studies or compiling an annotated bibliography. Rather, it involves *interpreting, synthesizing, and evaluating existing* knowledge in a way that frames and supports a new research inquiry (Leedy & Ormrod, 2021; Torraco, 2005; Webster & Watson, 2002). As Merriam (1988) notes, a literature review is “an interpretation and synthesis of published work.”

A strong literature review plays multiple roles—it provides a summary of key studies, a synthesis by drawing connections between them, and an evaluation of their contributions and limitations. The *summary* component recaps significant findings; *synthesis* involves organizing ideas to reveal patterns, relationships, or gaps; and *evaluation* assesses the rigor and relevance of each work. One common mistake in writing the literature review is to merely collect and describe sources without critically engaging with them—an approach that fails to produce original insight.

A good literature review compares and contrasts what is known about a topic and identifies what remains unknown (i.e., the knowledge gaps), thus preventing reinventing the wheel and the consequent redundant investigations. In doing so, it exposes knowledge gaps—areas that warrant further investigation—and helps to shape meaningful research questions (Leedy & Ormrod, 2021). Identifying such gaps creates opportunities for making original contributions to academic knowledge. It refines and supports the research problem, and situates the study within the broader academic conversation. In addition, the literature review serves to evaluate previous studies, detect inconsistencies or controversies, and synthesize findings to show how

the proposed research will contribute meaningfully to the field. By doing so, it demonstrates the researcher's capacity to critically appraise and integrate scholarly information, assuring readers that the research will offer new insights or address overlooked areas in the existing literature (Hart, 1998; Machi & McEvoy, 2016; Ridley, 2012).

Given that this section of a research report presents the work and conclusions of others, proper citation is essential throughout. However, over-referencing or excessive use of direct quotations should be avoided. The literature review should not introduce the researcher's own theories or opinions, which are more appropriate in the discussion or analysis sections.

A literature review can be an independent publication or a component of a broader research report. Within a research report, it may appear as a distinct section or be integrated into the introduction. In some cases—such as review articles—it is expanded into a full-length, stand-alone paper (e.g., a systematic or narrative review). Typically, journal articles include a brief overview of the most relevant literature within the introductory section, just before presenting the research problem. In contrast, theses and dissertations often mention only a few key sources in the introduction, while a comprehensive review of the literature is presented in a dedicated chapter. This dedicated chapter entitled *Literature Review* is the focus of this paper.

Basic Components of the Literature Review

A literature review is more than a summary of previous studies; it is a critical analysis of how concepts, theories, and evidence converge or diverge in relation to the research problem (Grant & Booth, 2016). An effective literature review is integrative, selective, analytical, and relevant to the research question. It typically includes four interrelated components: *conceptual review*, *theoretical review*, *empirical review*, and *methodological review*.

The Conceptual Literature Review

The conceptual literature review is a foundational section of the broader literature review in a research paper, thesis, or dissertation. Its main purpose is to clarify and deepen the reader's understanding of the key concepts and ideas that underpin the study. A conceptual review clarifies the key concepts and how they are understood and measured. It is a critical section within a broader literature review that focuses on analyzing and synthesizing key concepts, theories, frameworks, and models relevant to the research topic (Leedy & Ormrod, 2021; Ridley, 2012). Unlike a traditional literature review that may summarize empirical studies, a conceptual

literature review delves into the underlying ideas, definitions, and intellectual foundations that shape the research area.

The conceptual literature review examines major concepts related to the research problem, compares different conceptual frameworks and their applicability, identifies and defines core terms and constructs, and highlights how different scholars interpret these concepts. It integrates diverse viewpoints to reveal patterns, contradictions, or gaps and shows how concepts have evolved over time.

The conceptual literature review focuses on the core concepts, terms, and constructs that are central to a research topic. Rather than describing previous findings or theories (as in empirical or theoretical reviews), it explores how concepts are defined, understood, related, and applied across the academic literature. It answers questions such as: What does this concept mean? How has it been defined differently by scholars? How does it apply to the current research? What debates or ambiguities surround it? The conceptual review helps define key terms with precision and scholarly backing, clarify ambiguous or contested concepts, position the study within academic discourse, show how concepts relate to one another, and establish conceptual boundaries and scope (Jabareen, 2009).

The conceptual review is where you build the intellectual backbone of your study. It is not about "who found what," but about what concepts mean, how they are used, and why they matter. It prepares the ground for the theoretical and empirical reviews that follow. Including a strong conceptual literature review helps avoid conceptual confusion, ensures terminological consistency, strengthens your theoretical and analytical framework, and demonstrates intellectual maturity in navigating complex ideas.

The Theoretical Literature Review

Theoretical literature review examines the theories that explain the relationships between concepts. Each discipline has its own set of theories. Reviewing them will help identify theories that are relevant to the topic being investigated. The theoretical review answers the question, what theories, models or hypotheses address the problem and what do they say? For example, if reviewing literature on energy consumption and economic growth, the theoretical review might examine neoclassical growth theory, endogenous growth theory, and ecological economics theory, highlighting their strengths and weaknesses in explaining the relationship.

Most students or budding researchers usually mistake theoretical review for theoretical framework. The theoretical framework and theoretical review are related

but distinct components of research. While the theoretical framework is what you adopt to structure your study, the theoretical review is a discussion of various theories relevant to the topic, helping to justify the chosen theoretical framework (Kivunja, 2018). The theoretical framework refers to the structure or theory that guides the study among the existing theories. It provides the foundation for understanding the relationships between key variables in the research. It is often used to justify why a particular theory (or theories) is relevant to the study (Booth et al., 2016). It is typically presented early in a research paper or thesis to establish the study's conceptual foundation. The theoretical review involves a critical evaluation of existing theories related to the research topic. It helps identify gaps in the literature and supports the selection of an appropriate theoretical framework. It often compares and contrasts different theories to justify the best fit for the research. It is usually found in the literature review section.

The Empirical Review

Empirical literature review surveys what previous studies have found, including how they were conducted. An empirical literature review is an objective, thorough, summarized and critical analysis of major empirical studies that have been published on a topic (Booth et al., 2016; Webster & Watson, 2002). It tells us what previous research has done on the topic, what is found unsatisfactory or incomplete or troubling about the topic, and how the current research addresses what is unsatisfactory or incomplete or troubling about that topic (Leedy & Ormrod, 2021). Are there consistent findings or do past studies disagree? Are there flaws in the body of existing research that you think you can remedy? These are questions answered by a good empirical review. Make sure that this is a critical review where you comment on the strengths and weaknesses of the articles.

The empirical review should identify where the sources agree or disagree and how they relate to the research question of the paper. Like the Introduction, the literature review should convince the reader that your topic is interesting, is important, and fills a gap in the literature. It organizes the literature into subtopics, and documents the need for a proposed study. You should show a little bit of your understanding of the subject matter by reviewing, at a broader level, the most current literature in the field. This makes you understand more clearly the body of knowledge surrounding the variables of your study and this will enable you to fully appreciate the magnitude of the problems you are striving to find solution to. It will also enable you understand how other researchers who have worked on similar problem went about their studies (Leedy & Ormrod, 2021; Snyder, 2019).

You critically analyze earlier studies in terms of variations in methodology and research outcomes, and point out their limitations and how the present research will add to the existing knowledge. You focus on summarizing and highlighting the strengths and pointing out the weaknesses of previous research. Identify strengths and weaknesses of individual articles and strengths and weaknesses of the field as a whole. You may focus on one of the weaknesses in the prior research that your own study intends to address.

The Methodological Review

The methodological review is a specific section of the literature review that focuses on analyzing and evaluating the research methods employed in previous studies related to your topic. It discusses and synthesizes the various methodologies and designs that have been used in prior empirical research related to the study (Leedy & Ormrod, 2021). Unlike conceptual or theoretical reviews, which deal with ideas, frameworks, and constructs, the methodological review critically examines the how of past research—how data were collected, measured, analyzed, and interpreted.

The goal of the methodological review is to understand the range, strengths, limitations, and trends of methodological approaches used in existing literature. This enables researchers to make informed decisions about the most suitable methodology for their own studies and to justify those choices by comparing them with previous research.

The methodological review is essential for building a sound research design. It not only helps avoid methodological pitfalls but also ensures that the chosen approach is both credible and relevant. By thoughtfully examining how prior studies were conducted, a methodological review strengthens the foundation of any scholarly research.

While the conceptual, theoretical, empirical, and methodological reviews are distinct, they are also interdependent: While the conceptual review informs the choice of theories and variables, the theoretical review frames how variables are expected to relate, and the empirical review reveals how those relationships have played out in practice. An effective literature review weaves these elements together in a coherent narrative, identifying gaps that the current study will address. However, it is not necessary to include all the four components in a single study. Which components and the number of components to include depend on the type of the study—journal articles, theses or dissertations.

The Rule of Five

The *Rule of Five* is a heuristic that helps researchers ensure comprehensive and balanced coverage of each component of their literature review. After a general introduction to the literature, each concept, theory, empirical study, or method should be reviewed in light of five key elements specific to its category.

This rule promotes deeper understanding and comparison, prevents superficial or fragmented reviews, and enhances coherence and structure in academic writing. Below, the Rule of Five is detailed for conceptual, theoretical, empirical, and methodological reviews.

The Rule of Five for Conceptual Literature Review

The conceptual review defines and refines the core constructs in a study. Applying the Rule of Five, each relevant concept should be analyzed in terms of

1. Historical Evolution: Discuss the evolution of the concept over time.
2. Conceptualization: Discuss how various scholars have defined the core concept. Summarize the recent developments and ongoing debates in the conceptualization of the term. Identify ambiguities or unresolved issues.
3. Dimensions: Outline various types, classifications, or sub-dimensions of the concept. This helps capture complexity and nuance.
4. Measurement: Review how the concept is typically measured. Discuss different scales, indices, or proxies used for the concept.
5. Critique: Evaluate the concept vis-à-vis the research problem. Explain how the concept is understood within the context of your study, particularly when dealing with contested definitions and evolving constructs.

Using the Rule of Five for conceptual review, here is the conceptual review of pollution adapted from Biala (2019a) with in-text citations omitted:

"At its core, pollution refers to the introduction of harmful or undesirable substances into the environment in quantities or forms that disrupt natural systems or compromise human health. It encompasses physical, chemical, and biological agents that degrade air, water, soil, or living conditions. From an economic standpoint, pollution is viewed as an externality—an unintended side effect of production or consumption that imposes costs on others without compensation. This framing positions pollution not only as a scientific phenomenon but also as a socio-economic issue, necessitating a coordinated response from both policymakers and industries [**Conceptualization**].

Pollution, as a concept, has undergone significant transformation over time, shaped by the interplay of industrial growth, environmental degradation, and public awareness. In early societies, pollution was primarily a localized nuisance, often associated with waste accumulation or foul air in congested areas. However, the onset of industrialization dramatically altered this perception, as factory emissions, chemical runoff, and urban waste began to produce far-reaching and complex

environmental consequences. By the latter half of the 20th century, widespread ecological crises and landmark environmental publications had brought pollution to the forefront of scientific and policy debates, prompting formal recognition of its threats to both human and ecological well-being [**Historical Evolution**].

The manifestations of pollution are diverse and vary in terms of origin, scope, and impact. It includes commonly recognized types such as air and water pollution, but also less visible forms like noise and light pollution. Sources may be identifiable and concentrated, such as industrial discharge, or diffuse and widespread, such as agricultural runoff or vehicle emissions. Some pollutants degrade quickly and pose short-term risks, while others persist in ecosystems and accumulate over time, causing long-term or even irreversible damage. This complexity makes pollution a multi-layered challenge that requires context-specific strategies for control and mitigation [**Dimensions**].

Assessing pollution involves both scientific and economic approaches. On one hand, researchers measure pollutant concentrations in the environment, analyze their effects on health and ecosystems, and determine compliance with safety standards. On the other, economists seek to understand the social and economic impacts by estimating the costs associated with environmental damage, including healthcare burdens, loss of productivity, and ecosystem services. These assessments support the design of policies that balance environmental protection with economic efficiency [**Measurement**].

Pollution is directly relevant to the research problem addressed in the study, as it manifests in the form of widespread environmental litter caused by indiscriminate disposal of water sachets—a common by-product of Nigeria's response to inadequate potable water infrastructure. In Ilorin, this form of plastic pollution contributes to blocked drains, flooding, visual blight, and public health risks, illustrating how consumption patterns, weak waste management systems, and low environmental awareness converge to create persistent urban environmental problems. By framing water-sachet litter as a form of pollution that imposes social and ecological costs, the study justifies the need for an economic policy response. [**Critique**]."

This example demonstrates that the positions of first and second elements of the Rule of Five can be interchanged. The third and fourth paragraphs might be developed into subsections as in the original article, Biala (2019a). All the necessary in-text references are deliberately omitted from this example.

The Rule of Five for Theoretical Literature Review

The theoretical review explains the lens through which the research problem is understood. Each relevant theory should be reviewed based on its

1. Historical Background: Discuss the origins of the theory, who proposed it, and under what circumstances.
2. Central Propositions: Explain the core propositions, ideas, or mechanisms of the theory—what it tries to explain and how.
3. Underlying Assumptions: Identify the core assumptions behind the theory.
4. Relevance: Explain the relevance or application of the theory to the research problem.

5. Critique: Critically assess the strengths and weaknesses or limitations of the theory. Consider critiques from other scholars and practical limitations in application.

Below is an example of a review of the Theory of Planned Behavior restructured from Biala (2019b) into five distinct paragraphs, each reflecting an element of the Rule of Five for theoretical review:

"The Theory of Planned Behaviour (TPB) was proposed by Icek Ajzen in 1985 as an extension of the Theory of Reasoned Action (TRA), which he originally developed with Martin Fishbein (Fishbein & Ajzen, 1975). While TRA focused on the influence of attitudes and subjective norms on behavioural intention, it was limited to behaviours under full volitional control. To address this limitation, Ajzen introduced perceived behavioural control as a third determinant of intention, leading to the formulation of TPB (Ajzen, 1991). This addition allowed the theory to account for behaviours influenced by constraints such as resources, opportunities, or skills, and extended its applicability to a broader range of real-world contexts, including health, environmental, and consumer behaviours [**Historical Background**].

The TPB posits that human behaviour is guided by behavioural intentions, which are, in turn, determined by three key constructs: attitude toward the behaviour, subjective norms, and perceived behavioural control. Attitude refers to the degree to which an individual evaluates the behaviour favorably or unfavorably; subjective norms relate to perceived social pressure to perform or not perform the behaviour; and perceived behavioural control reflects the individual's belief in their ability to perform the behaviour (Ajzen, 1991). Together, these factors influence a person's intention to engage in a behaviour, which is the immediate antecedent of actual behavioural performance [**Central Propositions**].

TPB operates under several key assumptions. It assumes that individuals are rational and goal-directed, making decisions based on reasoned evaluations of the consequences of their actions. It also assumes that behaviour is planned and intentional, rather than spontaneous or habitual. Importantly, perceived behavioural control is not only assumed to influence intentions but may also directly affect behaviour when actual control is high. These assumptions imply a structured, cognitive process in which individuals weigh their attitudes, social expectations, and control perceptions before acting [**Underlying Assumptions**].

The theory has found extensive relevance in empirical research across a variety of disciplines. In environmental psychology, for instance, TPB has been applied to understand behaviours such as recycling, energy conservation, and eco-friendly consumption (Bamberg & Möser, 2007). Its structured framework enables researchers to identify the psychological and social drivers of intention and behaviour, making it especially useful in intervention design. The theory's flexibility has allowed it to be adapted and extended in different cultural and contextual settings, contributing to its continued relevance in applied behavioural research [**Relevance**].

Despite its strengths, TPB has been subject to critique. Scholars argue that it neglects the influence of unconscious processes, emotions, habits, and situational constraints that often shape behaviour in practice (Sniehotta et al., 2014). Furthermore, while the theory accounts for perceived control, it may underestimate the impact of actual behavioural control—factors such as poverty,

access, or institutional barriers—which can override intention. Additionally, the reliance on self-reported measures of intention and perception raises questions about predictive validity. These critiques suggest that while TPB offers a valuable foundation, it may need to be complemented by other frameworks when applied to complex or emotionally driven behaviours [**Critique**]."

It should be noted that this example does not imply that each component must be contained in one paragraph: Each element can be developed into two or more paragraphs depending on the theory being reviewed and the type of research report (e.g., journal articles, MSc theses, PhD dissertations, etc.)

The Rule of Five for Empirical Literature Review

The empirical review summarizes what other studies have done and found. It involves summarizing and evaluating what other researchers have done and found on your topic. It goes beyond listing studies—it should highlight methodological choices, regional and theoretical variations, and where consensus or disagreement lies. Following the Rule of Five, each relevant study should be reviewed in light of

1. Objective**:** Clarify the aim or general objective of the study. What question was the study trying to answer? Summarize the focus of the study.
2. Scope: Where and when was the study conducted? Indicate geographical, temporal, or sectoral focus.
3. Method: What variables, model, data source, estimation technique, or statistical tools were used? Highlight methodological choices and innovations. What were the key independent and dependent variables studied? Were there mediators or moderators? How were they defined or measured?
4. Findings: Summarize the key findings or main results. Point out any significant relationships, trends, or conclusions relevant to your own research.
5. Critique: What are the study's strengths and limitations? Was the model appropriate for the objective? Were there omitted variables or methodological weaknesses? Is the data outdated or limited in scope? How relevant or transferable are the findings to your research context?

Below is an example of an empirical review of a scholarly article, Biala and Aregbeyen (2018), using the Rule of Five framework:

"Biala and Aregbeyen (2018) examined the potential of a Deposit-Refund System (DRS) to manage litter arising from water sachets in Ilorin, Nigeria [**Objective** and **Scope**], using a mixed-methods approach that combined a quasi-experiment with a contingent valuation survey [**Method**]. Data were collected from 1,650 experimental participants and 454 survey respondents within the metropolis [**Method**]. The study employed binary logistic regression to identify the factors influencing compliance with the DRS, focusing on variables such as refund amount, income, redemption time, age, and environmental concern [**Method**]. The results showed that the DRS significantly increased

the return rate of used sachets, with higher refund values enhancing compliance, while higher income and longer redemption periods had a negative effect [**Key Findings**]. Although the findings demonstrate the short-term effectiveness of monetary incentives in promoting environmental responsibility, the study does not address the sustainability of this behavior over time or the economic feasibility of implementing DRS at a larger scale, which limits its immediate policy applicability [**Critique**]"

The Rule of Five for Methodological Literature Review

Applying the Rule of Five, the methodological review can be organized around

1. Philosophical Foundations: This part anchors the why behind a method. A methodological review doesn't just describe the method; so critically evaluate the logic and assumptions behind those methods (Crotty, 1998). This includes the method's ontology and epistemology.
2. Theoretical Foundations: Outline the key concepts, core ideas, and theoretical foundations (supporting theories) of the method.
3. Procedural Logic: This anchors the how of a method. In this part, explain how the method works, its key stages/steps or implementation frameworks. Whether qualitative, quantitative, or mixed methods, every methodology follows a process—such as data collection, sampling, coding, modeling, estimation, or validation—that can be mapped and critically examined.
4. Analytical Techniques: Describe the specific supporting tools, models, software, and statistical procedures used in applying the method.
5. Critique: Evaluate the method in terms of its contextual fit, appropriateness or suitability to specific research questions and contexts. The evaluation may include the strengths and weaknesses of the method—its robustness, effectiveness, reliability, and limitations.

Here is a review of the Contingent Valuation Method using the Rule of Five for methodological review:

"The Contingent Valuation Method (CVM) emerged in the 1960s and gained prominence in the 1980s following increasing demand for non-market valuation of environmental goods. Rooted in welfare economics and public goods theory, CVM was developed as a response to the inadequacy of market prices in capturing the value of non-market resources such as clean air, biodiversity, scenic beauty, and ecological services. Its foundational principles are attributed to Robert K. Davis's early work on valuing outdoor recreation and later formalization by Mitchell and Carson (1989), who helped establish it as a practical tool for cost-benefit analysis in environmental policy, particularly after the Exxon Valdez oil spill [**Theoretical Foundations**].

CVM is a stated preference technique in which individuals are asked directly how much they would be willing to pay (WTP) to obtain an environmental benefit or willing to accept (WTA) compensation for its loss. The method involves constructing a hypothetical market through carefully designed questionnaires or interviews that describe the good in question and elicit monetary values under specified scenarios. The valuation is "contingent" because it depends on a constructed, rather

than actual, market situation. CVM can be administered using open-ended questions, payment cards, bidding games, or dichotomous choice formats [**Procedural Logic**].

The method rests on several key assumptions. First, it assumes respondents are capable of understanding and valuing non-market goods when provided sufficient information. Second, it presumes individuals have well-defined preferences and can express them meaningfully even in hypothetical contexts. Third, it assumes the hypothetical scenarios do not trigger strategic bias, protest responses, or hypothetical bias—issues that could distort valuation. The accuracy of results is therefore contingent on the clarity, realism, and neutrality of the survey instrument [**Philosophical Foundations**].

In terms of analytical techniques, responses are typically analyzed using econometric models such as probit or logit (for dichotomous choice formats), or ordinary least squares (for open-ended responses). Aggregated WTP or WTA values are computed to inform policy decisions, and sensitivity analyses or scope tests are often used to assess internal validity. More advanced studies also incorporate bootstrapping, interval regression, or incorporate socio-demographic covariates to explain variations in valuation responses [**Analytical Techniques**].

CVM's strengths lie in its flexibility and ability to assign monetary values to goods for which market prices do not exist—such as existence value, bequest value, and option value. It is endorsed by institutions like the U.S. Environmental Protection Agency and the World Bank for use in environmental cost-benefit analyses. However, its weaknesses are equally notable: results may suffer from hypothetical bias, information bias, starting-point bias, and strategic bias. Critics argue that respondents may not treat hypothetical markets seriously, or may lack the cognitive ability to value complex or unfamiliar environmental goods. Nonetheless, when carefully designed and rigorously implemented, CVM remains a vital tool in environmental economics and public policy for capturing the full value of non-market goods and services [**Critique**]."

Again, all the necessary in-text references are deliberately omitted from this example.

Table 1 is a visual summary table that integrates the Rule of Five for conceptual, theoretical, empirical, and methodological literature reviews.

Table 1

The Rule of Five for conceptual, theoretical, empirical, and methodological reviews

Element	Conceptual Review	Theoretical Review	Empirical Review	Methodological Review
Element 1	Historical evolution	Historical background	Objective	Philosophical foundations
Element 2	Conceptualization	Central propositions	Scope/region	Theoretical foundations
Element 3	Dimensions	Underlying assumptions	Methodology (variables studied, data, model, tools)	Procedural logic
Element 4	Measurement	Relevance	Key findings	Analytical techniques
Element 5	Critique	Critique	Critique	Critique

Conclusion

This article has introduced the Rule of Five as a practical and structured framework for conducting comprehensive literature reviews in academic research. By breaking down the literature review into four key components—conceptual, theoretical, empirical, and methodological—and outlining five critical elements within each, the Rule of Five offers a systematic approach that simplifies an otherwise complex task. The framework helps researchers not only to understand and organize the existing body of knowledge but also to identify gaps, refine research problems, and establish a solid foundation for original inquiry. Ultimately, the Rule of Five serves as both a writing guide and a cognitive map, promoting clarity, depth, and analytical rigor in scholarly literature reviews.

The Rule of Five provides a structured and strategic approach to conducting and writing literature reviews. By ensuring that each concept, theory, and empirical study is examined through five focused lenses, researchers can produce reviews that are clear, comprehensive, and analytically rigorous. This guide is especially useful for undergraduate and postgraduate students, early-career researchers, and anyone seeking to improve the coherence and quality of their literature review. It transforms what often feels like a daunting task into a more manageable and meaningful scholarly exercise.

While the Rule of Five offers a structured approach to conducting literature reviews—across conceptual, theoretical, empirical, and methodological domains—it is important to recognize that the order of its elements should serve clarity and context, not constrain them. In particular, the first two elements may be interchanged without loss of coherence or rigor. This flexibility allows researchers to adapt the sequence to the specific logic of their subject matter or disciplinary conventions. For instance, in some cases, it may be more effective to clarify how a concept is used in the current study before tracing its historical development. However, it is recommended that the final elements—such as measurement and critique (in conceptual review) or analytical techniques and critique (in methodological review)—be generally preserved in that order, as they offer a natural culmination of the review process.

Given the nature and the newness of the Rule, few recommendations are in order. The Rule of Five should be used as a substructure for each section—not necessarily subheadings, but as an internal guide. Lecturers and research supervisors should consider integrating the Rule of Five into research methodology and academic writing courses to help students navigate the literature review process with greater confidence and coherence. Graduate and postgraduate students are encouraged to apply the Rule of Five to structure the literature review chapters of their dissertations

and theses. This approach ensures balanced coverage of key elements while maintaining relevance to the research focus.

Researchers can use the Rule of Five as a checklist for evaluating the completeness and quality of their own or others' literature reviews, enhancing academic rigor and avoiding common pitfalls like superficial coverage or methodological neglect. While the Rule of Five offers a general guide, researchers should feel free to adapt it based on the norms and expectations of their specific fields, especially in interdisciplinary research. Future research may apply, test, and refine the Rule of Five across disciplines to validate its utility and explore opportunities for expansion—such as the inclusion of policy or practical review dimensions.

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References

Biala, M. I. (2019a). A review of the economist's approach to pollution and its control. *Journal of Environmental Pollution and Control*, *2*(1), 1-17. https://annexpublishers.co/full-text/JEPC/2102/A-Review-of-the-Economist's-Approach-to-Pollution-and-its-Control.php

Biala, M. I. (2019b). Synthesizing the economist's and the psychologist's approaches to litter control for sustainable waste management. *Environmental Economics, 10*(1), 1-11. http://doi.org/10.21511/ee.10(1).2019.01

Biala, M. I., & Aregbeyen, O. (2018). An applicability test of the use of deposit-refund system for managing water-sachet litter in Ilorin, Nigeria. *Environmental Economics*, *9*(4), 22–43. http://doi.org/10.21511/ee.09(4).2018.03

Booth, W. C., Colomb, G. G., Williams, J. M., Bizup, J., & FitzGerald, W. T. (2016). *The craft of research* (4th ed.). University of Chicago Press.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process.* Sage Publications.

Grant, M. J., & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Information & Libraries Journal*, *26*(2), 91–108. https://doi.org/10.1111/j.1471-1842.2009.00848.x

Hart, C. (1998). *Doing a literature review: Releasing the social science research imagination*. Sage Publications. https://doi.org/10.1016/j.jbusres.2019.07.039

Jabareen, Y. (2009). Building a conceptual framework: Philosophy, definitions, and procedure. *International Journal of Qualitative Methods*, *8*(4), 49–62. https://doi.org/10.1177/160940690900800406.

Kivunja, C. (2018). Distinguishing between theory, theoretical framework, and conceptual framework: A systematic review of lessons from the field. *International Journal of Higher Education 7*(6), 44-53. https://ideas.repec.org/a/jfr/ijhe11/v7y2018i6p44.html

Leedy, P. D., & Ormrod, J. E. (2021). *Practical research: Planning and design* (12th ed.). Pearson.

Machi, L. A., & McEvoy, B. T. (2016). *The literature review: Six steps to success* (3rd ed.). Corwin Press.

Merriam, S. B. (1988). *Case study research in education: A qualitative approach.* Jossey-Bass.

Ridley, D. (2012). *The literature review: A step-by-step guide for students* (2nd ed.). Sage Publications.

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339.

Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, 4(3), 356–367. https://doi.org/10.1177/1534484305278283.

Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly, 26*(2), xiii–xxiii. https://www.jstor.org/stable/4132319