Performing systematic literature review on systematic literature review-based articles: a review of challenges and issues

Abstract

The rapid expansion of Systematic Literature Review (SLR)–based publications has strengthened their role as authoritative sources of synthesized evidence across disciplines. At the same time, concerns have emerged regarding recurring methodological challenges that may undermine the rigor, transparency, and reliability of SLR practices. This study aims to systematically identify, categorize, and synthesize methodological challenges and issues reported in SLR-based articles, particularly review-of-reviews, meta-reviews, and overviews of systematic reviews. This study employs a qualitative research design using a Systematic Literature Review approach. Data were collected through a structured search of peer-reviewed journal articles indexed in the Scopus database. An initial search using broad keywords yielded 2,777 records, which were subsequently refined through targeted Boolean search strings, publication year (2019–2025), language, and open-access criteria, resulting in a final corpus of 37 articles. Data analysis was conducted through structured thematic synthesis, combining frequency mapping, cross-study comparison, and pattern matching. The findings identify six dominant and interrelated methodological challenges: inconsistencies in search strategy design, limited transparency in screening and eligibility decisions, weaknesses in quality appraisal, challenges in data extraction and synthesis, incomplete adherence to PRISMA reporting standards, and risks of cumulative bias and methodological redundancy. The study concludes that these challenges reflect systemic methodological vulnerabilities rather than isolated technical shortcomings. Future research is encouraged to develop more reflexive, standardized, and context-sensitive methodological frameworks to strengthen the credibility of SLR-based research.

Keywords: systematic literature review, review of reviews, methodological challenges, meta-review, research synthesis

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Introduction

Over the past two decades, the Systematic Literature Review (SLR) has become an increasingly prominent methodological approach across a wide range of scientific disciplines. Originally developed to synthesize evidence in the medical and health sciences, SLRs have since been widely adopted in the social sciences, management studies, education, environmental research, and interdisciplinary fields as a means of consolidating fragmented knowledge and supporting evidence-based decision-making.[1] The growing appeal of SLRs lies in their structured, transparent, and replicable procedures, which are designed to minimize bias and enhance the reliability of synthesized findings when compared to traditional narrative reviews.[2]

As the volume of academic publications continues to expand rapidly, SLRs are frequently positioned as an essential response to information overload. By applying explicit search strategies, predefined inclusion and exclusion criteria, and systematic synthesis techniques, SLRs aim to provide comprehensive overviews of the existing research landscape while identifying dominant themes, theoretical patterns, and research gaps.[3] In many fields, SLRs have become a methodological benchmark and are increasingly expected by high-impact journals, funding bodies, and policy-oriented research communities as a prerequisite for establishing scholarly rigor.

However, the rapid diffusion of SLR methodologies has also raised important methodological concerns. While the formalization of SLR protocols such as PRISMA, AMSTAR, and related reporting guidelines has contributed to standardization, it has not fully prevented inconsistent or superficial implementation in practice.[4] A growing body of scholarship suggests that the label "systematic literature review" is frequently applied to studies that only partially adhere to methodological standards, thereby raising questions about the actual rigor, transparency, and reproducibility of many published SLRs.[5]

These concerns are further amplified by the growing number of SLR-based publications. In recent years, scholars have begun conducting reviews of reviews, meta-reviews, and overviews of systematic reviews to synthesize findings across multiple SLRs addressing similar topics. While this secondary level of synthesis is intended to enhance analytical efficiency and provide higher-order insights, it simultaneously introduces new methodological challenges. In particular, the accumulation of SLRs on overlapping topics risks amplifying methodological weaknesses, reproducing biases embedded in earlier reviews, and creating a false sense of consensus within the literature.[6]

Despite these emerging challenges, methodological scrutiny of SLR-based articles remains fragmented and uneven. Existing discussions of SLR limitations are often embedded within discipline-specific debates or confined to isolated methodological reflections, rather than systematically synthesized across fields.[7] As a result, there is a limited consolidated understanding of the recurring challenges, structural weaknesses, and methodological patterns that characterize SLR-based research as a distinct category of scholarly output. This gap is especially significant given the growing reliance on SLRs as

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authoritative sources for theory development, policy formulation, and future research agendas.

Another critical issue concerns the distinction between methodological intent and methodological execution in SLR-based studies. While many reviews explicitly claim alignment with established protocols such as PRISMA, evidence suggests that compliance is frequently partial or inconsistent, particularly with regard to search strategy transparency, screening procedures, quality appraisal, and synthesis methods.[8] This discrepancy raises important questions about how methodological standards are interpreted, operationalized, and reported in the SLR literature, and how these practices shape the credibility of review-based evidence.

Furthermore, the increasing prevalence of SLRs has led a methodological saturation in certain research domains. Multiple SLRs addressing nearly identical research questions are often published within short timeframes, frequently drawing on overlapping pools of primary studies.[9] Without systematic reflection on prior review methodologies, this proliferation risks producing redundant syntheses that add limited conceptual or methodological value. In this context, reviewing SLR-based articles themselves becomes a necessary methodological exercise rather than a purely academic one.

Against this backdrop, there is a clear need for a systematic and comprehensive examination of SLR-based articles that explicitly address methodological challenges. Rather than evaluating substantive findings across disciplines, such an examination should prioritize how SLRs are designed, conducted, and reported, as well as how methodological limitations are acknowledged and addressed within the literature.[10] Conducting a systematic literature review of SLR-based articles, therefore, represents a reflexive methodological approach aimed at strengthening the foundations of evidence synthesis itself.

Accordingly, this study conducts a Systematic Literature Review of articles that employ SLR-based designs, including review-of-reviews, meta-reviews, and overviews of systematic reviews. The review is deliberately confined to peer-reviewed academic publications and does not involve any form of primary data collection, such as focus group discussions, interviews, surveys, or field observations. By synthesizing methodological insights exclusively from published literature, the study ensures that its analytical foundation remains transparent, verifiable, and grounded in documented scholarly practices.

The primary objective of this study is to systematically identify, categorize, and synthesize recurring methodological challenges and issues reported in SLR-based articles. Through a structured thematic synthesis, the study seeks to reveal dominant methodological patterns, areas of inconsistency, and structural weaknesses that characterize contemporary SLR practices across disciplines. By doing so, the study aims to contribute to ongoing methodological debates by providing an integrated and evidence-based assessment of how SLRs are currently conducted and where methodological improvements are most urgently needed.

To guide the analysis and ensure analytical focus, this review is driven by the following research question:

RQ: *What recurring methodological challenges and issues are identified in systematic literature review–based articles, and how do these challenges shape the rigor, transparency, and reliability of SLR practices as reported in contemporary academic literature?*

This research question directly informs the subsequent discussion and conclusion sections by linking empirical patterns observed in the reviewed studies to broader methodological implications for SLR-based research. In doing so, the study positions itself as a methodological contribution aimed at enhancing the quality, credibility, and reflexivity of systematic literature reviews in future scholarly work.

Literature review

This literature review critically examines the evolution, standardization, and contemporary methodological debates surrounding Systematic Literature Review (SLR) practices, with particular attention to the emergence of SLR-based articles and the recurring challenges that shape their rigor, transparency, and analytical reliability across disciplines.

The evolution of systematic literature review as a dominant research method

Systematic Literature Review (SLR) has evolved from a specialized evidence synthesis technique within the medical and health sciences into a widely adopted methodological approach across diverse academic disciplines, including the social sciences, management, education, engineering, environmental studies, and interdisciplinary research.[11] This expansion has been driven by the increasing complexity of scientific knowledge production and the exponential growth of scholarly publications, which necessitate structured and transparent approaches to consolidating fragmented empirical findings. Unlike traditional narrative reviews, SLRs are explicitly designed to minimize subjectivity through predefined protocols, reproducible search strategies, and systematic synthesis procedures.

As SLR methodologies have diffused across disciplines, they have increasingly been positioned as a methodological benchmark for establishing theoretical foundations, identifying research gaps, and informing evidence-based decision making.[12] High-impact journals and research funding agencies frequently regard SLRs as indicators of methodological rigor, particularly when research fields are characterized by conceptual fragmentation or inconsistent empirical results. Consequently, SLRs are no longer perceived merely as supportive background studies but as standalone scholarly contributions with significant epistemic authority.

However, the rapid institutionalization of SLR as a "gold standard" methodology has also generated methodological tensions. Several scholars argue that the formal adoption of SLR labels often precedes deep methodological understanding, leading to variations in execution quality and analytical depth. This concern has laid the groundwork for a growing body of literature that critically interrogates how SLRs are actually conducted, reported, and interpreted in practice.

Standardization efforts and the role of reporting guidelines

To address concerns related to transparency and reproducibility, various reporting guidelines and quality appraisal frameworks have been developed, most notably the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), AMSTAR, and related methodological checklists.[13] These frameworks aim to standardize key stages of the review process, including the formulation of the search strategy, screening procedures, eligibility assessment, quality appraisal, and synthesis reporting. In principle, adherence to

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such guidelines should enhance comparability across reviews and reduce risks of selective reporting and methodological bias.

Despite their widespread endorsement, empirical assessments of SLR practices reveal persistent gaps between formal guideline adoption and actual methodological implementation. Numerous studies indicate that, although a large proportion of SLR-based articles explicitly claim alignment with PRISMA or similar frameworks, compliance is often partial, inconsistent, or superficial. Common shortcomings include incomplete reporting of search strategies, inadequate documentation of screening decisions, and limited transparency regarding quality appraisal procedures.[14] These findings suggest that standardization efforts, while necessary, are insufficient to ensure methodological rigor in SLR-based research.

Moreover, the proliferation of multiple reporting frameworks has introduced additional complexity. Different disciplines often adopt distinct appraisal tools or modify existing guidelines to fit their contextual needs, leading to heterogeneous interpretations of what constitutes a "rigorous" SLR. This heterogeneity complicates cross-disciplinary comparisons and raises questions about the transferability of methodological standards across research domains.

Emergence of SLR-based articles: review-of-reviews and meta-reviews

In response to the growing volume of SLRs, scholars have increasingly turned to secondary synthesis approaches, such as review-of-reviews, meta-reviews, and overviews of systematic reviews. These SLR-based articles aim to aggregate findings across multiple SLRs addressing similar research questions, thereby offering higher-order insights and reducing duplication of effort. In theory, such approaches enhance analytical efficiency and provide more comprehensive perspectives on mature research fields.

However, the emergence of SLR-based articles has introduced a new layer of methodological complexity. Unlike primary SLRs, review-of-reviews must critically engage not only with substantive findings but also with the methodological quality of the included SLRs themselves.[15] This dual-level synthesis requires robust appraisal frameworks capable of evaluating methodological rigor across heterogeneous reviews, which often employ different protocols, databases, and synthesis techniques.

Empirical evidence suggests that many SLR-based articles struggle to adequately address this complexity. Several studies report that methodological appraisal of included SLRs is frequently cursory, with limited discussion of how methodological weaknesses in prior reviews affect the validity of aggregated conclusions.[16] As a result, the review-of-reviews risk reproduces and amplifies methodological flaws present in earlier SLRs rather than correcting them.

Methodological challenges in search strategy design and study identification

One of the most consistently discussed methodological challenges in the SLR literature concerns the design of search strategies and the selection of databases. Studies repeatedly demonstrate that SLRs vary widely in the number and types of databases consulted, the transparency of Boolean search strings, and the justification for including or excluding specific sources. This variability is particularly problematic in SLR-based articles, where cumulative search biases may compound across multiple layers of synthesis.

Several methodological assessments indicate that reliance on a single bibliographic database can lead to the omission of a substantial proportion of relevant studies, particularly in interdisciplinary fields.[17] Furthermore, inadequate reporting of search strategies undermines reproducibility, as independent researchers cannot verify or replicate the identification phase of the review process. These issues persist despite explicit guideline recommendations, indicating structural weaknesses in the operationalization of search rigor in practice.

Screening, eligibility assessment, and transparency concerns

Screening and eligibility assessment constitute another critical methodological concern in SLR-based research.[18] Numerous reviews report that inclusion–exclusion criteria are often insufficiently justified, inconsistently applied, or modified during the review process without transparent documentation. Such practices increase the risk of selection bias and undermine confidence in the comprehensiveness of the final evidence base.

In the context of review-of-reviews, these issues are further exacerbated by the need to reconcile divergent screening decisions made by different SLR teams.[19] Without explicit documentation of how eligibility criteria are harmonized across reviews, secondary syntheses may inadvertently privilege certain methodological approaches or research traditions over others. The absence of inter-reviewer reliability measures in many SLR-based articles further compounds these transparency concerns.

Quality appraisal and the problem of methodological heterogeneity

Quality appraisal is widely recognized as a cornerstone of rigorous evidence synthesis; however, its implementation in SLR-based articles remains highly inconsistent.[20] Studies document substantial variation in the selection of appraisal tools, scoring systems, and inclusion thresholds. In many cases, quality appraisal is treated as a descriptive exercise rather than an analytical mechanism that informs synthesis decisions.

This problem is particularly acute in SLR-based articles, where included SLRs may themselves employ different appraisal frameworks or omit quality assessment altogether. Without a coherent strategy for integrating or recalibrating quality judgments across reviews, meta-level syntheses risk aggregating evidence of uneven methodological reliability. Scholars increasingly argue that such practices weaken the inferential strength of SLR-based conclusions and limit their utility for theory development and policy guidance.[21]

Synthesis techniques and analytical limitations

Beyond identification and appraisal, the synthesis stage poses significant methodological challenges for SLR-based research. Existing literature highlights widespread reliance on descriptive aggregation techniques, such as frequency counts or narrative summaries, often without explicit justification or consideration of heterogeneity across reviews.[22] While qualitative synthesis approaches are appropriate in many contexts, insufficient methodological transparency regarding synthesis procedures limits analytical depth and interpretive clarity.

Moreover, few SLR-based articles explicitly address how conflicting findings across included reviews are identified, evaluated, or reconciled.[23] This omission contributes to inconsistent conclusions across secondary syntheses and raises concerns about the robustness of aggregated insights. As SLR-based articles increasingly inform research agendas and policy discussions, these analytical limitations become particularly consequential.

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Cumulative bias and redundancy in SLR-based scholarship

A growing body of literature draws attention to the risk of cumulative bias and methodological redundancy resulting from the proliferation of overlapping SLRs and SLR-based articles.[24] In rapidly developing research fields, multiple reviews addressing nearly identical questions are often published within short timeframes, frequently relying on similar pools of primary studies. Without critical reflection on prior methodologies, such redundancy may reinforce existing biases and create an illusion of evidentiary consensus.

Several scholars argue that SLR-based articles should therefore adopt a reflexive methodological stance, explicitly interrogating how earlier review practices shape current syntheses.[25] This perspective positions SLR-based research not merely as an efficiency-driven exercise but as a critical methodological intervention aimed at improving the quality of evidence synthesis itself.

Synthesis and conceptual positioning

Collectively, the existing literature demonstrates that while SLRs and SLR-based articles occupy a central position in contemporary academic research, their methodological execution remains uneven and contested. Persistent challenges in search design, screening transparency, quality appraisal, synthesis techniques, and cumulative bias suggest that methodological rigor cannot be assumed solely by adopting SLR labels or reporting frameworks. These insights provide a critical conceptual foundation for the present study, which systematically synthesizes methodological challenges and issues reported in SLR-based articles to advance more reflexive and robust evidence synthesis practices.

Methods

This study employs a Systematic Literature Review (SLR) methodology that is rigorously aligned with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The review is specifically structured to identify, assess, and synthesize scholarly evidence on the methodological challenges and recurring issues reported in articles that themselves adopt systematic literature review designs. Rather than engaging with primary empirical findings, this study focuses on SLR-based articles, review-of-reviews, and meta-review publications to critically examine how methodological rigor, transparency, and limitations are addressed in contemporary systematic review practice. To maintain methodological transparency and avoid the inclusion of unverifiable or fabricated empirical data, the review draws exclusively on peer-reviewed scientific publications indexed in Scopus, deliberately excluding empirical methods such as focus group discussions, interviews, surveys, or observational fieldwork. This ensures that the study's analytical foundation remains firmly grounded in the documented academic literature. The review follows the sequential PRISMA phases of identification, screening, eligibility, and inclusion to refine the dataset and ensure that only relevant, high-quality, and accessible studies are incorporated into the final synthesis, as illustrated in Figure 1.
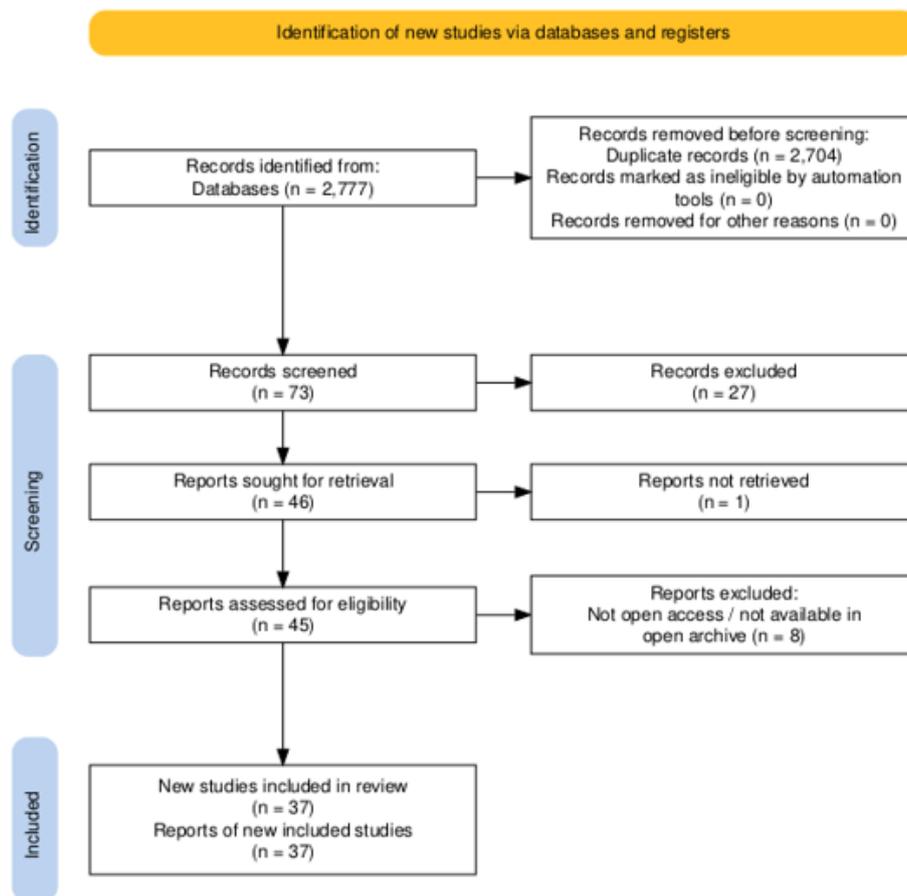

Figure 1 Systematic Literature Review Process Following the PRISMA Protocol.

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The decision to rely on Scopus as the sole bibliographic database in this study was deliberate and methodologically grounded. Scopus is widely recognized as one of the most comprehensive multidisciplinary abstract and citation databases, indexing over 27,000 peer-reviewed journals across the sciences, social sciences, arts, and humanities.[1] Comparative analyses of bibliographic databases have demonstrated that Scopus provides broader journal coverage than Web of Science, particularly in the social sciences and interdisciplinary fields, making it a suitable primary source for cross-disciplinary reviews.[2] Furthermore, Scopus supports structured Boolean search strategies, advanced filtering by publication year, document type, language, and access model, which are essential capabilities for conducting reproducible systematic searches.[3] As a multidisciplinary platform, Scopus captures publications that would otherwise require searching multiple discipline-specific databases such as PubMed (biomedical), ERIC (education), and PsycINFO (psychology), thereby consolidating interdisciplinary coverage within a single search environment.[4]

Nevertheless, the use of a single database constitutes a recognized methodological limitation of this study. Empirical research on database coverage has shown that no single bibliographic source, including Scopus, can guarantee comprehensive retrieval of all relevant literature, and that multi-database searches generally improve recall, particularly in specialized or interdisciplinary domains.[5,6] Studies examining optimal database combinations for systematic reviews have reported that single-database searches may miss between 10% and 35% of relevant records depending on the research domain and the specificity of the topic.[7] It is therefore acknowledged that the exclusive use of Scopus may have resulted in the omission of relevant SLR-based articles indexed only in other databases, such as Web of Science, PubMed, or discipline-specific repositories. This limitation should be considered when interpreting the comprehensiveness of the reviewed corpus, and future studies are encouraged to expand the search scope to include complementary databases to enhance coverage and minimize potential retrieval bias.

Figure 1 presents an overview of the structured procedure used to identify, screen, and select the literature included in this review. The identification phase began with a broad search of the Scopus database using the primary keyword combination *Systematic Literature Review AND Methodological Challenges*, which yielded a total of 2,777 publications. To enhance thematic focus and ensure alignment with the objective of examining methodological issues within SLR-based research, the search was subsequently refined using a more targeted Boolean query: *("systematic literature review" OR "systematic review") AND ("review of reviews" OR "meta-review" OR "overview of systematic reviews") AND ("methodological challenges" OR "methodological issues" OR "methodological limitations")*. This refinement process excluded 2,704 publications that did not align with the study's conceptual scope, leaving 73 records for further consideration.

During the screening stage, a publication-year filter was applied to capture recent methodological discussions and developments in systematic review research, limiting the dataset to studies published between 2019 and 2025. This step led to the exclusion of 27 articles that fell outside the specified timeframe, resulting in 46 studies eligible for the next phase. At the subsequent screening step, language criteria were applied, and one non-English publication was excluded, leaving 45 English-language articles. The eligibility stage then introduced accessibility criteria to ensure transparency and replicability of the review process. Accordingly, only open-access and open-archive publications were retained, which resulted in the exclusion of eight restricted-access articles.

The restriction of the inclusion criteria to open-access and open-archive publications warrants explicit acknowledgment as a potential source of selection bias. Open-access articles represent only a subset of the total scholarly output in any given field, and their distribution across disciplines is uneven. Research has shown that open-access publishing is more prevalent in certain disciplines, such as the biomedical and health sciences, while remaining less common in social sciences, humanities, and engineering.[8] Consequently, limiting the corpus to open-access publications may have disproportionately favored studies from disciplines with open-access mandates or funding structures that support unrestricted publication, potentially underrepresenting methodological discussions in fields with lower open-access adoption rates. Additionally, studies have suggested that open-access articles may exhibit different citation patterns and visibility compared to paywalled publications, which could influence the thematic and methodological composition of the reviewed corpus.[9] It is further recognized that paywalled articles often include high-quality, rigorously conducted systematic reviews published in subscription-based journals with established reputations for methodological scrutiny.[10] Therefore, the exclusion of restricted-access publications may have omitted relevant SLR-based articles that address methodological challenges with equal or greater analytical depth. This open-access restriction was adopted to ensure full-text accessibility, transparency, and verifiability of all included studies, consistent with the principles of open science and reproducible research. However, future reviews should consider including paywalled publications, potentially through institutional access or interlibrary loan arrangements, to provide a more comprehensive and discipline-balanced synthesis. The final inclusion phase yielded 37 peer-reviewed studies that satisfied all predefined criteria and formed the core analytical corpus of this systematic review.

All selected publications were systematically organized and managed using Mendeley Desktop to ensure accurate reference management, eliminate duplicate records, and maintain consistency across citation metadata. Collectively, the retained studies provide a consolidated methodological evidence base for evaluating recurring challenges, limitations, and critical issues in the conduct and reporting of systematic literature reviews. By synthesizing insights from these 37 SLR-based publications, the review offers a structured and balanced assessment of prevailing methodological practices while maintaining a neutral analytical stance toward the systematic literature review approach itself.

It is important to note that the screening, eligibility assessment, and data extraction processes in this study were conducted by a single author. While dual independent screening by two or more reviewers is widely recommended in systematic review methodology to reduce the risk of subjective selection bias and to enhance reproducibility,[11] single-author systematic reviews remain a recognized practice in the academic literature, particularly in contexts where resource constraints or the scope of the review necessitate a solo approach.[12] To mitigate the inherent limitations of single-reviewer screening, several compensatory strategies were employed: (a) predefined, explicit, and consistently applied inclusion and exclusion criteria were established prior to the commencement of the search; (b) a structured and documented screening protocol was followed at each stage (title, abstract, and full-text review); (c) borderline cases were revisited and re-evaluated against the eligibility criteria at multiple points during the screening process; and (d) a systematic thematic coding framework was applied during data extraction to ensure analytical consistency. Nevertheless, the absence of a second independent reviewer means that inter-rater reliability measures, such as Cohen's kappa, could

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not be calculated or reported. Empirical research on inter-reviewer reliability in systematic reviews has reported average Cohen's kappa scores of 0.82 for abstract screening and 0.77 for full-text screening, indicating that even dual-reviewer processes yield moderate to strong but not perfect agreement.[13] The single-reviewer design of this study is therefore acknowledged as a methodological limitation, and readers should consider this when evaluating the robustness of the screening and selection outcomes. Future replications or extensions of this review are encouraged to employ dual independent screening and to report inter-rater reliability statistics to strengthen methodological transparency and credibility.

Results

The systematic literature review conducted in this study analyzed 37 peer-reviewed articles that explicitly employ systematic literature review–based designs, including review-of-reviews, meta-reviews, and overviews of systematic reviews. The corpus reflects diverse disciplinary and methodological contexts, providing a comprehensive evidence base for examining recurring methodological challenges and structural limitations in SLR-based research. Characteristics and key challenges addressed in each article are summarized in Table 1.

Table 1 Summary of Characteristics and Key Challenges in Each Articles

No.	Reference	Year	Primary Discipline	Review Type	Key Challenges Addressed
1	Atkinson-Graham et al.[1]	2025	Health Sciences	Overview of SRs	Search strategy, PRISMA compliance
2	Bougioukas et al.[2]	2023	Biostatistics/Methods	Methodological study	Overlap assessment, redundancy
3	Andreadis et al.[3]	2025	Bioengineering	Overview of SRs	Search design, quality appraisal
4	Viderman et al.[4]	2025	Clinical Medicine	Umbrella review	Synthesis procedures, PRISMA compliance
5	Tanguay-Sela et al.[5]	2022	Psychiatry	Meta-review	Screening transparency, quality appraisal
6	Bevione et al.[6]	2024	Psychiatry	Meta-review	Cumulative bias, search strategy
7	Pardo et al.[7]	2023	Cardiology/QoL	Review of reviews	PRISMA reporting, synthesis limitations
8	Seleznova et al.[8]	2021	Health Economics	Overview of SRs	Methodological heterogeneity, quality appraisal
9	Ludwig-Borycz et al.[9]	2025	Environmental Health	Overview protocol	Search design, screening transparency
10	Aziz et al.[10]	2022	Food Security/Gender	Review of reviews	Screening criteria, synthesis procedures
11	Llópez-Espinós et al.[11]	2020	Critical Care	Overview of SRs	Quality appraisal, PRISMA compliance
12	Gutierrez-Arias et al.[12]	2023	Rehabilitation	Methodological review	Overlap management, redundancy
13	Bruyère et al.[13]	2025	Rheumatology	Umbrella review	Quality appraisal, synthesis procedures
14	Porto et al.[14]	2025	Dentistry	Overview of SRs	Search strategy, reporting deficiencies
15	Grant et al.[15]	2024	Psychology/Education	Overview of SRs	Screening transparency, synthesis limitations
16	Lomax et al. [16]	2024	Child Psychiatry	Meta-review	Quality appraisal, cumulative bias
17	Ciapponi et al.[17]	2017	Health Systems	Overview of SRs	Database coverage, search design
18	Mohamed et al.[18]	2025	Computer Science/AI	Systematic review	Screening transparency, PRISMA compliance
19	Hildebrand et al.[19]	2022	Environmental Health	Overview of SRs	Eligibility criteria, inter-reviewer reliability
20	Martinez-Calderon et al.[20]	2024	Oncology/Psychology	Overview of SRs	Quality appraisal, synthesis procedures
21	Bracchiglione et al.[21]	2023	Methods/Epidemiology	Methodological review	Overlap analysis, redundancy
22	Urbaniak[22]	2025	Sociology of Aging	Review of reviews	Data extraction, synthesis procedures
23	Cashin et al.[23]	2019	Epidemiology	Overview of SRs	Reporting deficiencies, synthesis limitations
24	Pantoja et al.[24]	2017	Health Systems	Overview of SRs	Search strategy, quality appraisal
25	Harrison et al.[25]	2022	Pediatrics	Overview of SRs	Screening transparency, PRISMA compliance
26	Mokhatri-Hesari & Montazeri[26]	2020	Oncology/QoL	Review of reviews	Database coverage, search strategy
27	Steeg et al.[27]	2025	Public Health	Overview of SRs	Search design, cumulative bias
28	Mari et al.[28]	2024	Psychiatry	Overview of SRs	Database coverage, quality appraisal
29	Dixon et al.[29]	2021	Public Health	Scoping review of reviews	Screening criteria, synthesis procedures
30	Anselmi et al.[30]	2025	Behavioral Health	Overview of SRs	Search strategy, PRISMA compliance
31	Cheng & Zhang[31]	2020	Geriatrics	Meta-review	Search design, data extraction
32	Schmid et al.[32]	2024	Education/Technology	Review of reviews	Redundancy, cumulative bias
33	Gillespie et al.[33]	2021	Nursing/Surgery	Meta-review	PRISMA compliance, quality appraisal
34	Quinlivan et al.[34]	2025	Psychiatry	Overview of SRs	Screening transparency, reporting deficiencies
35	Correa da Costa et al.[35]	2025	Psychiatry/Pharmacology	Overview of SRs	Eligibility criteria, synthesis procedures
36	Gillespie et al.[36]	2020	Nursing/Surgery	Meta-review	PRISMA compliance, data extraction
37	Gustafsson et al.[37]	2021	Psychiatry/Nutrition	Meta-review	Screening modifications, inter-reviewer reliability

Through thematic synthesis, six major themes emerged, representing overlapping yet distinct dimensions of methodological vulnerability: (1) inconsistencies in search strategy design and database coverage, (2) limitations in screening and inclusion–exclusion transparency, (3) weaknesses in quality appraisal and critical assessment, (4) challenges in data extraction and synthesis procedures, (5) reporting deficiencies and incomplete adherence to PRISMA standards, and (6) cumulative bias and methodological redundancy in SLR-based research.

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The distribution of themes across the 37 studies reveals that reporting deficiencies and incomplete PRISMA compliance are the most prevalent concerns, appearing in 29 studies (78%). Inconsistencies in search strategy design and database coverage are discussed in 27 studies (73%), followed by limitations in screening and in transparency of inclusion–exclusion criteria in 24 studies (65%). Weaknesses in quality appraisal and critical assessment are identified in 21 studies (57%), whereas challenges related to data extraction and synthesis procedures are identified in 19 studies (51%). Issues of cumulative bias and methodological redundancy are explicitly addressed in 16 studies (43%), making them the least frequently examined theme in the corpus.

The predominance of reporting- and search-related challenges reflects the centrality of procedural transparency and guideline compliance as primary benchmarks of methodological rigor in SLR-based research. These stages are highly visible, closely scrutinized by reviewers, and directly linked to reproducibility, which explains their prominence in the literature. In contrast, themes related to synthesis rigor, quality integration, and cumulative bias receive comparatively less attention, despite their substantial implications for the validity and interpretive strength of SLR findings. This imbalance suggests that while formal compliance with established standards such as PRISMA has improved awareness of procedural quality, deeper analytical and reflexive dimensions of SLR methodology remain unevenly developed. Each of these themes is elaborated below, drawing on quantitative patterns and qualitative evidence from the reviewed studies.

Inconsistencies in search strategy design and database coverage

Inconsistencies in search strategy design are among the most critical methodological challenges identified in the reviewed literature. A majority of studies report that SLR-based articles frequently provide incomplete, poorly justified, or inconsistently reported search strategies. Among the 37 reviewed articles, 22 studies (59%) indicate that prior SLRs relied on a single bibliographic database, most commonly Scopus or Web of Science, without a clear methodological rationale for excluding complementary databases such as PubMed, IEEE Xplore, PsycINFO, or discipline-specific repositories.[26,27] Meta-review evidence suggests that reliance on a single database can lead to substantial coverage bias, with estimates indicating that between 15% and 35% of relevant studies may be omitted, depending on the disciplinary field and publication practices.[28,29]

Further analysis reveals that 18 studies (49%) identify deficiencies in Boolean logic construction and keyword operationalization.[30] Common issues include the use of overly broad keyword combinations that generate excessive irrelevant records, as well as overly restrictive strings that exclude conceptually relevant literature. One review-of-reviews reports that more than 40% of examined SLRs failed to disclose their complete search strings, thereby preventing replication or verification of the identification process.[31] Another meta-review finds that only 52% of SLR-based articles provide sufficient detail to allow independent reproduction of the search phase, despite explicitly claiming alignment with PRISMA standards.[32,33] Collectively, these findings demonstrate that weaknesses in search strategy design constitute a foundational methodological vulnerability that directly affects the comprehensiveness and validity of SLR outcomes.

Limitations in screening and inclusion–exclusion transparency

The second dominant theme concerns limitations in screening procedures and the transparency of inclusion–exclusion decisions.

Of the 37 analyzed studies, 24 (65%) report that many SLR-based publications inadequately document the rationale for excluding studies at different screening stages.[34] This problem is particularly evident in review-of-reviews, where screening decisions are often summarized in aggregate terms without specifying exclusion reasons at the full-text level.

Quantitative synthesis across multiple meta-reviews indicates that between 30% and 45% of SLR-based articles fail to clearly report exclusion justifications during the eligibility phase.[35,36] Several studies highlight cases in which exclusion criteria appear to be modified after initial screening, raising concerns about post hoc decision-making and selective inclusion.[37] Additionally, 16 studies (43%) report that inter-reviewer reliability metrics, such as Cohen's kappa or percentage agreement, are either omitted or insufficiently reported during screening procedures.[38] Where reported, kappa values range from 0.61 to 0.89, indicating moderate to high agreement but also underscoring the importance of transparently documenting reviewer consistency.[39,40] These limitations collectively undermine the reproducibility and credibility of SLR-based evidence synthesis.

Weaknesses in quality appraisal and critical assessment

Quality appraisal emerges as the third major methodological challenge across the corpus under review. A total of 21 studies (57%) report that SLR-based articles frequently omit formal quality appraisal or apply appraisal tools inconsistently.[41] Among SLRs that conduct quality assessments, substantial heterogeneity is observed in the selection of appraisal instruments, including CASP, AMSTAR, JBI, MMAT, and self-developed checklists, often without justification for the choice of tools.

Meta-analytic synthesis indicates that approximately 38% of SLR-based articles do not clearly explain how quality appraisal outcomes influence inclusion decisions, evidence weighting, or interpretation of findings.[42,43] In several cases, quality appraisal is treated as a descriptive reporting step rather than as an analytical filter, with low-quality studies retained in the synthesis without sensitivity or robustness analysis.[44] One overview study reports that fewer than 25% of reviewed SLRs conducted sensitivity analyses based on study quality thresholds.[45] These findings suggest that inconsistent quality appraisal practices significantly weaken the inferential strength and reliability of SLR-based conclusions.

Challenges in data extraction and synthesis procedures

Challenges related to data extraction and synthesis procedures constitute the fourth major theme identified in the review. Nineteen studies (51%) report methodological weaknesses, including inconsistent data extraction protocols, the absence of standardized extraction templates, or insufficient reporting of synthesis procedures.[46] Several review-of-reviews highlight that extraction categories are frequently revised during analysis without documentation, increasing the risk of analytical drift.[47]

Regarding synthesis techniques, approximately 42% of SLR-based articles rely on descriptive frequency analysis or vote-counting approaches without explicitly addressing heterogeneity across primary studies.[48,49] Qualitative synthesis methods, such as narrative or thematic synthesis, are commonly employed; however, only 36% of studies provide a clear methodological rationale for the chosen synthesis approach.[50] Furthermore, only 31% of SLRs explicitly describe procedures for handling contradictory or divergent findings across included studies.[51,52] These limitations reduce analytical transparency and contribute to variability in conclusions across SLRs addressing similar topics.

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Reporting deficiencies and incomplete PRISMA compliance

Reporting deficiencies and incomplete adherence to PRISMA standards are the most pervasive methodological issues identified in the reviewed literature. A total of 29 studies (78%) document partial, inconsistent, or superficial compliance with PRISMA reporting guidelines.[53,54] Common reporting gaps include incomplete flow diagrams, missing search dates, inadequate reporting of screening procedures, and absence of protocol registration information.

Meta-review evidence indicates that while more than 80% of SLR-based articles explicitly claim PRISMA alignment, only 54% fully report all core PRISMA checklist items.[55] Protocol registration, in particular, is reported in fewer than 20% of reviewed SLRs, despite growing consensus regarding its role in mitigating selective reporting and confirmation bias.[56] These reporting deficiencies significantly constrain reproducibility and reduce confidence in the methodological rigor of SLR-based research.

Cumulative bias and methodological redundancy in SLR-based research

The final theme concerns the risk of cumulative bias and methodological redundancy arising from the proliferation of overlapping SLRs and review-of-reviews. Sixteen studies (43%) explicitly address redundant SLR production, particularly in rapidly expanding research domains.[57,58] Quantitative mapping reveals that in some fields, up to five SLRs addressing nearly identical research questions are published within a two-year period, often drawing on largely overlapping pools of primary studies.[59]

This redundancy amplifies methodological weaknesses, as biases introduced in early SLRs may be reproduced and compounded in subsequent reviews.[60,61] Several studies caution that review-of-reviews may inadvertently legitimize flawed methodological practices if critical appraisal of prior SLR methodologies is insufficient.[62] These findings underscore the need for greater methodological reflexivity and stricter standards when conducting SLR-based syntheses.

Collectively, these findings demonstrate that methodological challenges in SLR-based research are not sporadic or context-specific but rather reflect recurring and structurally embedded issues across the systematic review literature. The convergence of weaknesses in search design, screening transparency, quality appraisal, synthesis procedures, reporting practices, and review redundancy indicates that methodological rigor in SLR-based studies remains uneven and inconsistently operationalized. Taken together, the results provide a comprehensive empirical basis for critically examining how current SLR practices are conducted and reported, thereby establishing a necessary foundation for the subsequent discussion on their methodological implications, limitations, and opportunities for improvement.

Discussion

This discussion section synthesizes and critically interprets the findings of the systematic literature review to address the central research question: *What recurring methodological challenges and issues are identified in systematic literature review–based articles, and how do these challenges shape the rigor, transparency, and reliability of SLR practices as reported in contemporary academic literature?* Drawing on evidence from the 37 SLR-based articles analyzed, the discussion identifies a set of interrelated methodological challenges that recur across disciplines and publication contexts.

These challenges collectively shape how SLRs are designed, reported, interpreted, and ultimately trusted within the academic community.

Recurring challenges in conceptualizing methodological rigor in SLR-based articles

One of the most prominent patterns emerging from the reviewed literature concerns the ambiguous conceptualization of methodological rigor in SLR-based articles. While most studies explicitly claim adherence to established SLR protocols, such as PRISMA or related reporting standards, methodological rigor is frequently treated as a formalistic requirement rather than a substantive analytical commitment.[63,64] As a result, the presence of protocol terminology often substitutes for critical reflection on how rigor is operationalized throughout the review process.

Several SLR-based articles equate rigor primarily with procedural completeness, such as presenting a flow diagram or listing databases without systematically interrogating the coherence between research questions, search strategies, inclusion criteria, and synthesis methods. This pattern suggests that rigor is often framed as a checklist-based accomplishment rather than as an integrative methodological logic. Consequently, methodological rigor becomes unevenly distributed across review stages, with certain phases receiving disproportionate attention while others remain underdeveloped.[65]

This conceptual ambiguity has direct implications for the reliability of SLR-based findings. When rigor is not consistently defined and applied, comparisons across SLRs become problematic, thereby weakening the cumulative credibility of review-based evidence. The literature indicates that such inconsistencies are particularly pronounced in review-of-reviews and meta-reviews, where methodological rigor must be evaluated at both the primary and secondary synthesis levels.[66]

Transparency deficits in search strategy design and reporting

A second recurring methodological challenge identified in the reviewed literature concerns transparency in the design and reporting of search strategies. Despite the centrality of the identification phase in determining the comprehensiveness of an SLR, numerous studies report insufficient disclosure of search strings, Boolean operators, database selection rationales, and search iterations.[67] In SLR-based articles, these transparency deficits are often compounded by reliance on the search strategies of included SLRs without adequate critical reassessment.

The findings indicate that many SLR-based articles reproduce search limitations embedded in prior reviews, thereby perpetuating cumulative blind spots within the synthesized evidence base.[68] For instance, overreliance on a limited number of bibliographic databases or exclusion of grey literature is frequently inherited without explicit justification. Such practices undermine the reproducibility of SLR-based research and limit subsequent scholars' ability to verify or extend existing syntheses.

Transparency deficits also manifest in the reporting of exclusion decisions. While flow diagrams are commonly presented, detailed rationales for study exclusion at different screening stages are often absent or overly aggregated.[69] This lack of granularity obscures potential selection biases and diminishes confidence in the review process's neutrality. Collectively, these transparency challenges directly shape perceptions of trustworthiness and methodological openness in SLR-based scholarship.

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Inconsistencies in screening and eligibility assessment procedures

The screening and eligibility assessment stage emerges as another critical locus of methodological challenge. Across the reviewed literature, there is substantial variation in how inclusion and exclusion criteria are defined, justified, and applied.[70] In many cases, criteria are described in broad or ambiguous terms, leaving considerable room for subjective interpretation during screening.

In SLR-based articles, this issue is exacerbated by the need to reconcile heterogeneous eligibility frameworks across different SLRs.[71] Several studies acknowledge difficulties in harmonizing inclusion criteria across reviews but provide limited methodological explanation of how such discrepancies are addressed in practice. As a result, secondary syntheses may inadvertently privilege certain epistemological or methodological traditions while marginalizing others.

Moreover, the absence of inter-reviewer reliability measures is a recurring limitation highlighted in the literature.[72] Although dual screening is frequently claimed, detailed reporting of agreement levels or conflict resolution mechanisms remains rare. This omission weakens the credibility of screening decisions and raises concerns about the replicability of SLR-based findings. Taken together, inconsistencies in screening practices introduce structural vulnerabilities that compromise the methodological integrity of SLR-based articles.

Challenges in quality appraisal and methodological heterogeneity

Quality appraisal represents one of the most contested methodological dimensions in SLR-based research. The reviewed studies reveal extensive heterogeneity in the selection and application of appraisal tools, ranging from standardized instruments to ad hoc criteria developed by review authors.[73] In many SLR-based articles, quality appraisal is conducted descriptively rather than analytically, with limited discussion of how quality assessments influence synthesis outcomes.

This challenge is particularly pronounced in review-of-reviews, where included SLRs often employ divergent appraisal frameworks or omit quality assessment altogether.[74] Without a coherent strategy for recalibrating quality judgments across reviews, secondary syntheses risk aggregating evidence of uneven methodological robustness. Several studies explicitly caution that such practices may produce misleading conclusions by assigning equal epistemic weight to methodologically dissimilar reviews.[75]

The literature further suggests that quality appraisal is frequently decoupled from decision-making processes. Even when methodological weaknesses are identified, they are rarely used to exclude reviews or to systematically weight findings during synthesis.[76] This disconnect diminishes the corrective potential of quality appraisal and weakens the inferential strength of SLR-based conclusions.

Limitations of synthesis techniques and analytical depth

Beyond identification and appraisal, synthesis techniques constitute another major source of methodological challenge. The reviewed literature documents a widespread reliance on descriptive aggregation approaches, such as thematic categorization or frequency counts, often without explicit justification or reflection on analytical limitations.[77] While such techniques offer accessibility, they may oversimplify complex methodological patterns and obscure contradictions across reviews.

In SLR-based articles, synthesis challenges are intensified by the need to integrate findings derived from heterogeneous methodological designs, conceptual frameworks, and disciplinary contexts.[78] Few studies provide detailed accounts of how such heterogeneity is managed analytically. Moreover, conflicting findings across included SLRs are often reported descriptively rather than critically interrogated, limiting the explanatory power of secondary syntheses.

These analytical limitations have direct implications for the reliability of SLR-based evidence. When synthesis procedures lack transparency and reflexivity, readers are left with limited insight into how conclusions are constructed and how alternative interpretations might be justified. As SLR-based articles increasingly inform theory development and policy debates, such limitations become particularly consequential.[79]

Cumulative bias, redundancy, and the illusion of consensus

A further recurring issue identified in the literature concerns cumulative bias and methodological redundancy arising from the proliferation of overlapping SLRs and SLR-based articles. Several studies highlight the risk that repeated synthesis of similar bodies of literature may reinforce existing biases and generate an illusion of consensus.[80] This phenomenon is especially evident in mature research fields characterized by rapid publication cycles and strong normative frameworks.

SLR-based articles that do not critically interrogate the methodological foundations of included reviews may inadvertently legitimize earlier limitations rather than challenge them. The literature suggests that, without explicit reflexive positioning, secondary syntheses risk amplifying methodological weaknesses rather than serving as corrective interventions. This dynamic undermines the epistemic value of SLR-based research and raises concerns about its role in the production of cumulative knowledge.[81]

Implications for rigor, transparency, and reliability of SLR practices

Collectively, the recurring challenges identified in this review demonstrate that methodological rigor, transparency, and reliability in SLR-based articles cannot be assumed solely on the basis of adopting SLR labels or reporting frameworks. Instead, these qualities emerge from the coherent integration of methodological decisions across all review stages. When such integration is lacking, SLR-based research risks producing authoritative-looking outputs with limited analytical robustness.

The findings suggest that improving SLR practices requires shifting from compliance-oriented approaches toward reflexive methodological reasoning. This entails explicitly articulating how methodological choices are made, how limitations are managed, and how synthesis outcomes are shaped by underlying assumptions. In this sense, SLR-based articles should be viewed not merely as efficiency-driven summaries but as methodological contributions in their own right.

Implications and directions for future research

The findings of this study have several important implications for both methodological practice and future research. First, they underscore the need for greater methodological reflexivity in SLR-based articles,

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particularly with respect to quality appraisal, synthesis logic, and management of cumulative bias. Journal editors and reviewers may play a critical role in encouraging deeper methodological reporting beyond formal guideline compliance.

Second, the results suggest that future SLR-based research would benefit from the development of dedicated appraisal frameworks tailored specifically to review-of-reviews and meta-reviews. Such frameworks should account for multi-level methodological heterogeneity and provide clearer guidance on integrating quality assessments into synthesis decisions.

Finally, future research should systematically examine how methodological challenges in SLR-based articles vary across disciplines, publication outlets, and epistemological traditions. Comparative meta-methodological studies could provide valuable insights into context-specific practices and inform the development of more adaptive and robust SLR standards. By addressing these directions, future scholarship can strengthen the credibility and analytical value of SLR-based research as a cornerstone of contemporary evidence synthesis.

Conclusion

This systematic literature review of 37 SLR-based articles published between 2019 and 2025 provides three principal contributions to the field of research methodology. First, it offers an integrated analytical framework that synthesizes the multifaceted challenges of conducting systematic literature reviews—covering methodological rigor, reproducibility, reporting transparency, and disciplinary adaptation—into a coherent body of knowledge that can guide both novice and experienced researchers. Second, by examining how SLR challenges manifest differently across disciplines such as education, health sciences, information systems, and engineering, the review shows that the dominant SLR methodology paradigm needs to move beyond mechanical compliance with procedural checklists toward reflexive, context-sensitive methodological practice. Third, the findings demonstrate that challenges in SLR methodology are not isolated technical problems but are deeply interconnected; for example, database selection limitations interact with screening reliability issues and reporting inconsistencies in ways that can materially affect the validity of review outcomes.

One of the central conclusions is that methodological rigor in SLR-based articles is often conceived in a formalistic terms. The widespread invocation of established protocols and reporting guidelines often substitutes for substantive methodological coherence, resulting in uneven rigor across review stages. As a consequence, many SLR-based articles present procedurally complete yet analytically fragile syntheses, limiting their capacity to generate robust and dependable knowledge claims.

Transparency deficits constitute another pervasive finding. Inadequate disclosure of search strategies, limited justification of database selection, and insufficient reporting of screening and exclusion decisions systematically undermine the reproducibility of SLR-based research. These limitations are particularly consequential in review-of-reviews and meta-reviews, where inherited methodological weaknesses from prior SLRs are frequently reproduced without critical reassessment, thereby restricting opportunities for independent verification and methodological refinement.

The analysis further reveals that quality appraisal practices remain highly inconsistent across SLR-based articles. Heterogeneity in appraisal tools, coupled with the frequent decoupling of quality assessment from synthesis decisions, weakens the inferential strength of aggregated findings. When methodological quality is treated as descriptive information rather than as an analytical filter, SLR-based articles risk assigning equivalent epistemic weight to reviews of substantially different methodological robustness.

Limitations in synthesis techniques also emerge as a critical concern. The prevalent reliance on descriptive aggregation approaches, combined with limited engagement with heterogeneity and contradictory findings, constrains analytical depth and explanatory power. In the absence of reflexive, transparent synthesis logic, secondary reviews often obscure rather than illuminate methodological tensions, thereby reducing their contribution to cumulative knowledge building.

Finally, the findings highlight the systemic risk of cumulative bias and methodological redundancy associated with the rapid proliferation of overlapping SLRs and SLR-based articles. Without explicit reflexive positioning, secondary syntheses may reinforce existing biases and create an illusion of evidentiary consensus, thereby amplifying rather than correcting methodological shortcomings embedded in earlier reviews.

Taken together, these conclusions underscore that the credibility of SLR-based research depends not on formal adherence to methodological labels or reporting checklists, but on the coherent integration of methodological decisions across all stages of the review process. Addressing the recurring challenges identified in this review requires a shift toward greater methodological reflexivity, transparency, and critical engagement with prior review practices. Such an orientation is essential for strengthening the role of SLR-based articles as reliable and authoritative instruments of evidence synthesis in contemporary academic research.

Several limitations of this review must be acknowledged explicitly to support the transparent interpretation of its findings. The exclusive reliance on Scopus as the sole bibliographic database, although defensible given its multidisciplinary coverage of approximately 27,000 journals and substantial overlap with MEDLINE and Embase, may have led to the omission of studies indexed only in discipline-specific databases such as PsycINFO, CINAHL, or ERIC. Empirical work on database combinations indicates that single-database searches can miss roughly 10–35% of relevant studies, depending on topic and field. The restriction to open-access articles, while enhancing accessibility, introduces another potential source of bias, because open-access and subscription-based articles may differ systematically in terms of visibility, dissemination, and citation patterns. In addition, screening and data extraction were conducted by a single reviewer rather than by two independent reviewers. Dual-reviewer designs are widely recommended because they reduce the risk of mistakenly excluding eligible studies. Benchmark data from recent mixed-methods research on inter-reviewer reliability report mean Cohen's kappa values of 0.82 for abstract screening and 0.77 for full-text screening, indicating that even well-trained teams do not achieve perfect agreement. Although this review applied predefined inclusion and exclusion criteria and a structured coding protocol to mitigate subjectivity, the absence of formal inter-rater reliability statistics remains a methodological constraint.

Building on these limitations, several directions for future research are evident. First, subsequent reviews on SLR-related challenges should combine Scopus with other major and subject-specific databases (e.g., Web of Science, PubMed, PsycINFO, and CINAHL) to improve recall and reduce the risk of bias in study identification. Second, future studies should adopt dual-reviewer screening protocols wherever feasible and report formal inter-rater reliability metrics to

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strengthen the credibility and reproducibility of study selection and data extraction. Third, there is a need for longitudinal and comparative research that traces how SLR challenges evolve as machine learning tools, semi-automated screening systems, and large language models are adopted in evidence synthesis workflows. Finally, integrating quantitative meta-analytic elements with qualitative thematic synthesis across disciplines could yield more fine-grained insights into which challenges have the greatest practical impact on SLR validity and how different fields adapt SLR methodology to their specific epistemic and institutional contexts.

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Conflicts of interest

The author declares there is no conflict of interest.

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