

# Review of Systematic-Narrative Hybrid Literature: An Approach to Concise Methodology Integration into A Manuscript

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**Abstract:** *Building a home without a plan might lead to a structurally flawed building. To evaluate a building's quality and suitability for its intended use, a comprehensive examination of its foundation is necessary. This also applies to literature reviews, which ought to be built upon a solid methodology that specifies the search approach, inclusion/exclusion standards, literature sources, and information synthesis techniques used to build the arguments and conclusions that are presented to the reader. This research note describes a hybrid systematic-narrative approach that may be used in a literature review paper without giving the reader too much information*

**Keywords:** Systematic-narrative hybrid literature review, integration, concise

## I. INTRODUCTION

Almost all empirical research, regardless of the subject, begin with literature reviews. The material they gather, compile, and present is relevant to a research topic (Snyder, 2019). They should be presented in a way that makes it easy for the reader to understand various points of view without having to consult the original publications. A reliable literature review will include an extensive reference section with easily accessible information of the reviewed books.

In our internationally interconnected research environment, which generated over three million peer-reviewed publications in over 33,100 active journals in 2018 alone, literature reviews play a pivotal role (Johnson et al., 2018). They combine parts of extensive databases of reliable research that, when taken as a whole, may assist in addressing acceptable research questions. Additionally, they provide original viewpoints on previously conducted investigations and are published as respectable research articles in and of themselves. For a literature review to be legitimate, like with any other research project that looks at an issue, it must follow a process that includes a number of open and honest steps. The most effective method for identifying, choosing, and combining published information to address a specific research issue is to conduct systematic literature reviews. Too frequently, assessments of the literature provide intriguing results without providing sufficient documentation of the methods used to conduct the literature search.

For instance, a lot of literature reviews neglect to address the search strategy that was used to find the articles, they undervalue the caliber of the studies that are included, they don't identify the sources of the items that were found, and they leave out crucial inclusion and exclusion criteria that were utilized in the search. Stated differently, they do not provide a sufficient technique that would reassure readers that the published studies, which form the basis of the data in the literature review, were gathered using a strong set of protocols (Oxman & Guyatt, 1988). Research articles that don't include a sufficient methodology section may be rejected by reputable journals (Khadilkar, 2018). When writing a manuscript, writers need to be aware of how many words are allotted to each area of the work. The quantity of text an author may use to convey their work is limited by the formatting standards for most journals (Walsh & Downe, 2005). The limitations are contingent upon the journal, the nature of the submission, and any publisher rules. Tables, references, and appendices may or may not be included in the word and page restrictions.



Gerring and Cojocar (2016) discovered that the majority of political science publications had word restrictions ranging from 8000 to 10,000 words, which were often inclusive of references. Aware of these word limits, writers may decide to allocate words sparingly in their methodology section or to leave out any mention of the search techniques they used for their literature review. On the other hand, some writers could prioritize their search technique above other parts of the work by giving too thorough explanations of it. Finding the "Goldilocks Zone" of word allocation for technique sections—that is, just enough to persuade the reader that a rigorous approach was followed—while avoiding overcrowding the section and jeopardizing word count for other parts of the manuscript—is a difficulty faced by writers of literature reviews. That is the purpose of this study note.

## 2. Narrative versus systematic literature reviews

Various strategies are used for literature reviews. Terms for literature review approaches include 'narrative', 'integrative', 'systematic', and 'scoping' (Par'e et al., 2015; Snyder, 2019). Literature extraction and analysis are usually done via systematic and narrative reviews (Cipriani & Geddes, 2003; Greenhalgh et al., 2018). There are pros and cons to using these methods for literature reviews.

Narrative reviews cover the literature well but do not explain evidence-gathering processes (Collins & Fauser, 2005). Critics argue that narrative reviews are biased in their literature selection and lack transparency in the review process (Par'e et al., 2015). Greenhalgh et al. (2018) argue that narrative reviews may be organized. Narrative reviews are biased yet may increase knowledge, interpretation, and criticism (Greenhalgh et al., 2018). Systematic reviews aim to eliminate bias in literature selection and describe the search methods. Systematic reviews need a thorough search approach with clear inclusion and exclusion criteria that other researchers may reproduce to get comparable findings (Greenhalgh et al., 2018; Linnenluecke, 2020). Meta-analysis for quantitative data must be specified and used in this technique (Magarey, 2001). For smaller research with short timelines, systematic reviews may be time-consuming and uneconomical.

Also, publishers' word or page length constraints may make it difficult to demonstrate a systematic search process without taking up too much material. Can narrative and systematic techniques be combined to create a methodology that can be used in a persuasive and word-count-efficient manuscript? A hybrid approach using narrative and systematic literature methodologies has been successful in computing (Boyle et al., 2012), education (Fleischer, 2012), psychiatry (Robinson, 2016), and social media (Sarmiento, 2020).

These studies, which examined various topics, explained systematic search criteria for article selection and described a narrative method to literature synthesis. Each literature review has a methodological section. This study describes a way to strengthen a literature review manuscript's methods section without using too many words. The suggested style combines narrative and systematic review elements. Thus, we call this 'Systematic-narrative hybrid literature review'. Table 1 compares our strategy to narrative and systematic methods.

## 3. Blueprint for writing a systematic-narrative hybrid literature review

view Fig. 1 highlights the key elements inherent in our proposed approach towards writing the methodology section for a systematic-narrative hybrid literature review. The six subsections to include in a paper's methodology section that adopts our proposed hybrid methodological design begins with the research questions, followed in sequence by a justification for the literature review methodology, the literature sources, search parameter design, data cleaning, and ending with information synthesis.

These six elements of the methodology are outlined in the following discussion. 3.1. Research questions Research methodologies are selected on their usefulness in answering the research questions (Cipriani & Geddes, 2003), so it is important to include research questions in the methodology section of a manuscript. These should be clearly articulated and ideally presented as a numbered list in the sequence to which they are to be addressed. The use of labels such as 'RQ1', 'RQ2' is an effective way to convey this



Table 1 a . Differences and similarities between narrative, systematic, and systematicnarrative hybrid literature reviews.

Features	Narrative	Systematic	Systematic-narrative hybrid literature review
Question	Broad	Specific	Specific, linked to search criteria
Source	Not usually specified, potentially biased	Comprehensive sources, explicit search approach	Comprehensive sources, explicit search approach
Selection	Not usually specified, potentially biased	Criterion-based selection, uniformly applied	Criterion-based selection, uniformly applied
Evaluation	Variable	Rigorous critical evaluation	Rigorous critical evaluation
Synthesis	Often Qualitative	Quantitative	Elements of Qualitative and Quantitative
Inferences	Sometimes evidence-based	Usually evidence-based	Usually evidence-based

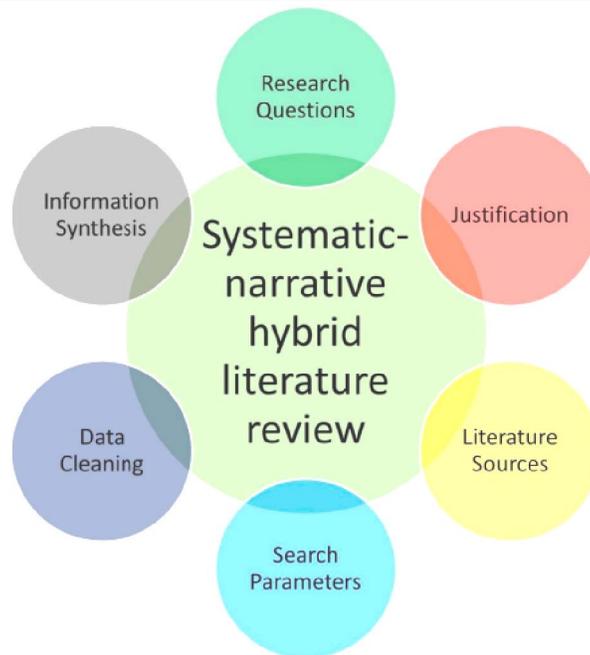


Fig. 1. Key elements of the systematic-narrative hybrid literature review approach.





research questions, followed in sequence by a justification for the literature review methodology, the literature sources, search parameter design, data cleaning, and ending with information synthesis. These six elements of the methodology are outlined in the following discussion.

### 3.1. Research

Research methodologies are selected on their usefulness in answering the research questions (Cipriani & Geddes, 2003), so it is important to include research questions in the methodology section of a manuscript. These should be clearly articulated and ideally presented as a numbered list in the sequence to which they are to be addressed. The use of labels such as 'RQ1', 'RQ2' is an effective way to convey this information for studies with more than one research question. Consideration can also be given to the use of tables to display research questions which are comprised of sub-questions. For example, 'RQ1: RQ1.1, RQ1.2; RQ2: RQ2.1, RQ2.2' and so forth. Whatever presentation style is selected, it is important to ensure that research questions are unambiguous and are clearly related to the search criteria identified in the methodology.

### 3.2. Justification

It is essential to provide some indication as to why a literature review's methodology was appropriate. Explaining to the reader why a particular methodology was adopted is crucial to the representation of a literature review study as a rigorous research endeavor. Narrative literature reviews are of value in providing readers with a broad overview of relevant literature (Rother, 2007; Turnbull et al., 2021a). Narrative review articles usually adopt a qualitative approach toward the presentation of findings and typically do not include a discussion of methods used to locate literature (Rother, 2007).

A justification for the hybrid systematic-narrative approach should include a statement that the search protocols and inclusion/exclusion criteria draw from elements of systematic review practices and applies a narrative approach to analyse the shortlisted articles (see Turnbull et al., 2021b). For example, Best et al. (2014)'s exploration of published literature on the impact of online communication and social media on the well-being of young people, employed systematic review techniques to identify the literature while applying narrative methods to synthesize the results in the discussion section of their paper.

In another example, Fleischer (2012), in their study of one-to-one computer projects in Swedish high schools, employed a detailed article selection and exclusion protocol presented in the form of a flowchart to supplement narrative approaches to article analysis based on content analysis of the underlying text. The adoption of a hybrid systematic-narrative style in both of these literature reviews resulted in the inclusion of a dedicated methodology section that clearly laid out the article selection and synthesis approaches applied to their studies.

### 3.3. Literature sources

Specifying the location of retrieved articles should be included in the methodology section of a literature review. Online databases of published works are among the most common sources of literature, and these should be clearly identified in the methodology section, along with a justification for their choice. As a matter of good practice, it is essential to include more than one bibliographic database to reduce the possibility of publication bias (Paez, 2017). Therefore, a precise listing of all databases used should be specified. Sources of grey literature, not controlled by commercial publishers, could also be included. Such literature can be retrieved using online databases such as EBSCOhost, Gale, Proquest and OpenGrey.

### 3.4. Search parameters

A measure of a quality literature review is that the search can be replicated to achieve similar results. Therefore, the methodology section needs to provide enough information to enable a reader to implement the search parameters used to extract the included articles (Snyder, 2019). A recommended approach is to specify the Boolean search string developed for each research question, including notes on necessary adjustments made for specific databases. Boolean



search strings include operators such as AND, OR and NOT and are useful for incorporating synonyms and antonyms to create a single search operation for each research question. A synonym table could also be included to support the specified search strings. Any restrictions applied to database searches should also be mentioned, such as English-only publications, publication date limitations, and type of literature (e.g., peer-reviewed only).

### **3.5. Data cleaning**

The articles retrieved in the search process need to be further examined to ensure that they are suitable candidates for inclusion in the analysis phase of the review. This cleaning process will depend on the research questions and the type and quantity of research articles extracted from specified data sources. For example, article rejection could be based on a thorough review of each document's abstract and conclusion to determine their relevance to the research problem being investigated (Linnenluecke et al., 2020).

Alternatively, if the use of specific terminology is crucial to the capacity of an article to address a research question, search functionality such as CTRL-F could be employed to search the text of each document for keywords to justify inclusion in the analysis phase of the review. In this stage, duplicate or redundant articles should also be removed. A flow chart that visually represents the search strategy and article shortlisting process could also be included to add clarity to more complex article selection and cleaning procedures.

### **3.6. Information synthesis**

The final step in formulating the methodology section of a hybrid systematic-narrative literature review is to outline how the retrieved articles were analyzed, and their findings synthesized for presentation in the discussion section. This process will vary depending on the nature of the research problem and methodological choices adopted in each examined article. For example, qualitative studies could be analyzed using content analysis, where the text is carefully categorized against emerging codes to identify significant commonalities and differences between the studies.

Gioia (2020) describes an approach to reporting qualitative findings that uses grounded theory to immerse in the research participants' interpretations and experiences using direct quotes. This provides readers with explicit data-theory connections that validate grounded theory models developed from participant statements. Alternatively, a review of quantitative studies may involve a meta-analysis of numerical results from papers that address the same research hypothesis (Gopalakrishnan & Ganeshkumar, 2013). It is also helpful to mention any software (such as NVivo or SPSS) that may have been used to facilitate the analysis process.

## **II. CONCLUSION**

A literature review study without a clear methodology is like a house without a blueprint: there cannot be confidence that the foundations upon which the literature review was constructed are sufficiently robust to support convincing outcomes. This research note argues that it is just as essential to include an adequate methodology section in a literature review manuscript as in any other study.

We propose a hybrid systematic-narrative literature review approach that builds on the best of both systematic and narrative reviews and provides the foundations for a compelling methodology without overburdening researchers. We also provide a framework comprising six elements that can serve as a checklist for ensuring that the essential components of a systematic-narrative hybrid literature review's methodology are included in the manuscript. However, undertaking the proposed hybrid approach can be complex, time-consuming, and often fraught with selection bias and selective reporting risks. Nevertheless, we hope this research note will inspire further reflection on the importance and desired characteristics of robust research methodologies for literature review manuscripts.



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