## Similarities and differences between literature reviews, systematic reviews, scoping reviews and meta-analyses

<table>
<thead>
<tr>
<th>Literature Review</th>
<th>Scoping Review</th>
<th>Systematic review</th>
<th>Meta-analysis</th>
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<tbody>
<tr>
<td><strong>Aim/Definition</strong></td>
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<tr>
<td>Scholarly</td>
<td>A scholarly literature review summarises evidence on a topic using a formal writing style and adopting qualitative data collection methods to select and interpret studies. Can involve some quantitative analysis.</td>
<td>A scoping review is a rapid gathering of literature in a given area, to explore the breadth and depth, extent and quantity of research available where the topic is large, complex and heterogeneous. Often preparatory to a systematic review as it is used to determine relevant questions to ask.</td>
<td>A systematic literature review is a detailed overview of primary research on a focused, specific question that identifies, selects, synthesizes, and appraises all high-quality research evidence relevant to that question.</td>
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<tr>
<td>Non-scholarly</td>
<td>A non-scholarly literature review summarises positions or evidence on a topic using an informal, narrative-based approach and an informal writing style. Goals/objectives may not be formally stated. May be written for entertainment, general interest, or self-promotion.</td>
<td>To capture the breadth of literature; identify gaps in a research area; used as a precursor to a systematic review. Provide a narrative or descriptive account of available information.</td>
<td>Clear objectives are stated. Answers a focused and often a clinical question. Provide empirical evidence that meets prespecified criteria.</td>
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<tr>
<td><strong>Goals/Objectives</strong></td>
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<tr>
<td>Scholarly</td>
<td>Generally either question-focussed, statement-focussed or hypothesis-focussed</td>
<td>The research question is often broad, and imprecise and designed to elicit more specific questions. The question is exploratory in nature.</td>
<td>Focussed on a single clearly defined and answerable question</td>
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<tr>
<td>Non-scholarly</td>
<td>Not necessarily focussed on a question—may merely be a general overview.</td>
<td>The question is often clinical in nature (often PICO is used as a guide).</td>
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<tr>
<td><strong>Question</strong></td>
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<tr>
<td>Scholarly</td>
<td>No particular criteria for the research question is used. All relevant literature that bears upon the research question/statement/hypothesis can be either mentioned in passing or explored in detail.</td>
<td>Not required</td>
<td>The question is often clinical in nature (often PICO is used as a guide).</td>
</tr>
<tr>
<td>Non-scholarly</td>
<td>Not required</td>
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<tr>
<td><strong>Eligibility criteria (inclusion/exclusion criteria)</strong></td>
<td>Informed by the bias, interests, scholarly inclinations of the researcher</td>
<td>Inclusion/exclusion criteria are often developed post hoc i.e., informed by the review process.</td>
<td>Inclusion/exclusion criteria are formally defined at the outset of the protocol stage.</td>
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<tr>
<td><strong>Protocol</strong></td>
<td>No research protocol is required</td>
<td>A research protocol is often determined <em>a priori</em> (without recourse to experience) and post hoc (after the review is completed).</td>
<td>A peer-reviewed protocol or research plan is included.</td>
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<td><strong>Process of extracting information</strong></td>
<td>Can be implicit and not always described in a non-scholarly literature review.</td>
<td>Scoping reviews follow a specific process. This is similar to systematic reviews with the following exception: the data extraction stage involves charting (see the JBI Manual for evidence synthesis).</td>
<td>Systematic reviews often follow a specific process. This is explained in the PRISMA Guidelines.</td>
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<tr>
<td>Scholarly</td>
<td>Not described in a non-scholarly literature review.</td>
<td>Identify research question. Determine pre-specified eligibility criteria (inclusion-exclusion criteria). Adoption of a systematic search strategy. Select studies meeting criteria. Extract data from included studies. Chart evidence. Interpretation and presentation of results. Reference list.</td>
<td>Identify research question (e.g., using PICO, SPIDER, PCC or other research tool). Determine pre-specified eligibility criteria (inclusion-exclusion criteria). Adoption of a systematic search strategy. Select studies meeting criteria. Extract data from included studies. Evaluate risk of bias of included studies. Assessment of the validity of findings.</td>
</tr>
<tr>
<td>Non-scholarly</td>
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</tbody>
</table>
## Structure
- There is no set structure for a literature review and discipline-specific variations are possible. The common elements are:
  - Introduction
  - Discussion
  - Conclusion
  - Reference list
- These are typically not identified as such.

## Search strategy
- Not described

## Process of selecting articles
- Evaluation of study quality may or may not be included
- Not explicit or required
- All study types, non-standard sources of information
- Restricted to certain study types

## Process of evaluating articles
- Not clear or explicit

## Results and data synthesis
- May be influenced by the reviewer’s theories, needs (e.g., the research gap) and beliefs
- Not clear or explicit
- Clear summaries of studies based on high-quality evidence
- Clear summaries of studies based on high-quality evidence
- Quantitative analysis only

## Discussion
- Written by an expert or group of experts with a detailed and well-grounded knowledge of the issues, or otherwise an emerging scholar (e.g., for a PhD dissertation)
- Usually written by an individual
- The summary of studies is usually descriptive
- Uses a checklist of 20 essential reporting items as outlined in the PRISMA extension for scoping reviews
- Written by an expert or group of experts with a detailed and well-grounded knowledge of the issues and familiarity quantitative analysis techniques

## Value
- Provides summary of literature on a specific topic
- Provides summary of literature on a specific topic
- Assists in establishing viable research questions for further systematic review
- Connects practicing clinicians to high quality evidence
- Supports evidence-based practice
- Determines statistically significant effect sizes, correlations, tenancies, prevalence rates, and so on

## Interpretation and presentation of results
- No set structure. Writing may meander on the general topic
- The structure for a scoping review is very variable but usually includes the following:
  - Key questions to be addressed
  - Context
  - Objectives
  - Methodology
  - Results
  - Conclusions
  - Reference list
- The structure for a systemic review typically consists of the following:
  - Key questions to be addressed
  - Context
  - Objectives
  - Methodology
  - Results
  - Conclusions
  - Reference list

## Reference list
- Variable, but generally follow the structure of a scientific report:
- Introduction
- Method
- Results
- Discussion
- Conclusion
- Reference list
- Appendices

(Siddaway, nd)