

Systematic or Scoping Review: Choosing the Best Review For You

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You have a topic and interest in conducting a literature review to learn more about it. While there are several review types to choose from, you have narrowed your choices to either a systematic or a scoping review. So which review is right for your team? Systematic and scoping reviews appear similar on the surface. Both are comprehensive literature analyses with seemingly identical steps and documentation requirements. However, differences in the research questions, quantity of results, quality or risk of bias assessment, and reporting guidelines result in two distinct research designs.

Research question: Systematic reviews require a focused research query, and teams often employ the [PICO framework](#) to formulate a well-designed question. Though not required, ideally that question should be answerable with studies utilizing similar study designs, e.g. RCTs, as this makes quality assessment, risk of bias review, synthesis, and comparison easier. Scoping reviews ask broader questions. PICO may not be an appropriate framework, so review teams can choose from [several frameworks](#) to construct their research question(s). The [Joanna Briggs Institute](#) recommends the PCC or Population, Concept, and Context method to frame a scoping review question. Scoping reviews often have sub-questions, which should fit under the main question defined by the chosen question framework. As scoping reviews are more likely to be charting or scoping the landscape of a topic, they can more easily accommodate different study designs in the synthesis.

Quantity: The broader questions and exploratory nature of scoping reviews often generate larger amounts of references to screen when compared to systematic reviews. A scoping review search strategy might be iterative, changing over time with further review of the scope, and so yielding more results. A systematic review applies a fixed search strategy developed prior to the conduct of the searches, which ensures that the results retrieval is more predictable.

Quality and risk of bias analysis: [Assessment of quality and risk of bias](#) for each included study is mandatory for systematic reviews. These analyses are optional for scoping reviews, which may be an advantage given the greater quantity of studies to screen and the likely different study designs included for a scoping review.

Reporting guidelines: Systematic and scoping reviews have distinct reporting guidelines. Systematic review teams should use the PRISMA checklist, established in 2009 and currently undergoing revisions, to write up their review. The PRISMA 2009 checklist contains 27 items, including several about quality and the risk of bias. Scoping review teams should consider using the [PRISMA-ScR](#) checklist. The PRISMA-ScR checklist has 22 items, two of which are optional items about bias or quality assessment.

Protocol: Regardless of the review type, all review teams should develop and register a [protocol](#). Systematic review teams should use the [PRISMA-P](#) checklist and consider registering their protocol on [PROSPERO](#). There are no guidelines for developing a protocol for a scoping review; however, teams can develop a protocol based on the title, introduction, and method sections of the PRISMA ScR checklist. PROSPERO does not currently accept protocols for scoping reviews so teams can deposit and publish their protocol in a repository such as [DigitalHub](#).

Both systematic and scoping reviews are well-recognized vehicles for providing evidence syntheses but your question and goals will determine which methodology is appropriate. Contact your Galter [liaison librarian](#) to learn more about systematic and scoping reviews or discover which one might work best for your project.

Further reading

Munn Z, Peters MD, Stern C, Tufanaru C, McArthur A, Aromataris E. [Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach](#). BMC Med Res Methodol. 2018;18(1):143.

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