Author’s response to reviews

Title: Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach

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Response to reviewer comments:

Thank you to the reviewers and editor for your feedback. We have made a number of changes to this manuscript based on your feedback which we believe have improved this document substantially. Our point by point response to feedback is below and changes have been highlighted in the document.

Editor Comments:

In addition to the referee comments, please address the following:

Include in the Competing Interests section that Zachary Munn is a member of the editorial board of the journal.

Completed, thank you.

Reviewer reports:

Diane L. Lorenzetti, PhD (Reviewer 1):
This article differentiates between systematic and scoping reviews and provides guidance to assist researchers in selecting the most appropriate review methodology that aligns with their research questions and review purpose. Given the increasing interest in scoping reviews as an approach to literature synthesis, there is a need for articles that can provide researchers with guidance on selecting the most appropriate methodology for a given research question.

Thank you for this succinct summary. We agree that guidance is needed for those choosing a review approach.

On page 3, the authors state that "there has not been clear guidance regarding the key indications or reasons why reviewers may choose to follow a scoping review approach". A number of authors including Arksey and O'Malley and Levac have been reasonably consistent in their identification of the benefits or functions of scoping reviews - for example, to map the literature in a defined discipline. Would it not be more appropriate to state that authors may be inconsistent in their interpretation of this guidance? On that note, is there any evidence to support this belief?

Thank you, this is an excellent point. The actual issue is that scoping reviews are done for purposes that do not align with the original indications as outlined by Arsey and O'Malley. Levac makes this observation and it is also seen in the scoping reviews of scoping reviews by Pham and Tricco. We have made some changes to the introduction to clarify these points.

On page 4, the authors state: "scoping reviews (which are also sometimes called scoping exercises/scoping studies) have emerged as a valid approach with rather different indications to those for systematic reviews." The scoping review methodology is but one of many approaches to synthesis that have emerged in recent years - realist reviews being another. Prior articles that summarize various review approaches include:


The authors might consider including a sentence or two that situates scoping reviews as one of many evolving yet methodologically related approaches to conducting synthesis reviews. A recent editorial by David Moher and colleagues in BMC Systematic Reviews speaks to this:


Thank you, this is a very good point. We have added some extra information on the various evidence synthesis types that now exist.

On page 4, line 26 the authors state "In 2015, a methodological working group of the JBI produced formal guidance for conducting scoping reviews." Could the authors clarify how this manuscript expands on this previous paper?

Thank you, we have added that the purpose of this paper adds to and expands on the indications for scoping reviews as compared to previous work.
Page 4, the authors list six purposes for conducting scoping reviews. I am unclear as to the distinction between two of these. Specifically: "To identify the types of available evidence in a given field" and "To identify and analyze gaps in the knowledge base". As both would identify gaps in the literature, are they not two sides of the same coin? Would it not be reasonable to collapse the two into one - or, at a minimum, link them in the text?

This is an excellent point, and the reviewer is quite right that they are two sides of the same coin. However, they have also been traditionally listed as indications for scoping reviews. We have made some changes to the discussion to address this and highlight that there is some overlap between the indications, and authors may choose to conduct a scoping review for one or more of the six listed purposes.

I appreciate the authors' use of examples to illustrate instances where a scoping review would be an appropriate approach to synthesizing the literature and consider this a key strength of this piece.

Thank you for this positive feedback, we also believe the use of clear examples will hopefully bring some clarity to this field.

Page 7 line 46, the authors assert that a "key difference between scoping reviews and systematic reviews is that in terms of a review question, a scoping review will have a broader "scope" than traditional systematic reviews" While this is certainly true, scoping reviews also differ from systematic reviews in their overriding purpose. This could also be emphasized here.

Thank you, we have emphasised this here.

Discussion

Portions of the Discussion section seems to more appropriately belong in an Introduction - Specifically, the comparison between scoping reviews and more traditional literature reviews, and differentiation between scoping reviews and evidence maps/content analysis.

Thank you for this comment. We agree that some sections could be in either the introduction or discussion, but think it is probably preferable to include the detailed discussion on concept analysis and evidence maps in the discussion once the reader is clear on the purpose of scoping reviews, otherwise this may lead to more confusion if placed in the introduction.

The inclusion of a discussion of how authors and journal publishers could advance the scoping review methodology and promote consistency in the application of current guidelines would be a valuable addition to this paper. For example, standard reporting guidelines similar to PRISMA guidelines for systematic reviews could encourage appropriate application, conduct and reporting of studies that adopt this methodology.

An extension to the PRISMA statement on the reporting of scoping reviews is currently under development and should be referenced in this manuscript:
http://www.prisma-statement.org/Extensions/InDevelopment.aspx

This is a very good point. We have added some information to the discussion regarding this and made reference to the PRISMA ScR extension.

Igho Onakpoya, MD; MSc; DPhil (Reviewer 2): The authors have provided a succinct description of the indications for conducting either scoping or full systematic reviews. They have attempted to more explicitly delineate between the two types of reviews. However, they have missed out rapid (expedited) reviews which also provide useful insights into available evidence, and also increasingly being used by guideline developers and policy makers. Rapid reviews can lead to decisions about whether full systematic reviews should be conducted. In light of this, the authors should include a comparison of rapid reviews in this piece, and describe at what point it may be relevant on the scale of evidence synthesis

Thank you for this feedback, this is an excellent point. We have included a section on rapid reviews in the discussion as we do believe there is some confusion regarding the choice of rapid and scoping reviews here as well. We have provided a simple definition and an indication of when a rapid review approach may be chosen.