

# The 5 most common mistakes you're making when attempting to publish a systematic review

*Takeaways from the Systematic reviews 101 webinar on Researcher Academy*

## 1 Your objectives lack research purpose

Systematic reviews are attempting to answer a very specific research question. Even if your review checks all other boxes, if the question you are attempting to answer has already been answered by other systematic reviews, and brings no new insights, it will not be publishable.

**Tip:** Do your homework – are there other recent reviews covering this topic that have already answered your question? Do you have a sufficiently novel angle?

## 2 Your search strategies have been poorly defined

Systematic reviews are meticulous, well-planned, and exhaustive. If your search strategy has not been properly crafted and documented, transparently capturing all the literature which may be of relevance to answering your question, you are at high risk of producing biased results.

**Tip:** Document all the search terms, study types, databases, and all the choices you make in your search to keep the validity of your strategies in check.

## 3 You failed to consider the importance of having an adequate risk of bias assessment model

Bias in research can skew the results of a study, and including biased studies in a systematic review can therefore undermine its validity by biasing its overall result. While it can be very difficult to assess the extent to which a study is biased, systematic reviewers can assess the potential for risk of bias.

**Tip:** Domain-based methods which directly address methods used in a study, and which avoid scores and scales, are the fairest test for assessing risk of bias.

## 4 Your interpretation of the strength of the evidence is unstructured or unsystematic

Systematic reviews require a systematic assessment of the strength of scientific evidence of the overall body of evidence which you synthesize in answering your research question. This means you need a planned approach which identifies issues which are important in determining confidence in your results (such as overall risk of bias in the evidence, heterogeneity of results, publication bias, etc.). The higher the quality of the material, the more reliable the results of your review will be; the better your appreciation of the limits of the evidence base, the more valuable your review will be to other scientists.

**Tip:** There are existing protocols and tools for assessing the level and strength of evidence of studies. Be sure to find the right one for your research and field.

## 5 You didn't plan enough in advance

Systematic reviews are a complex, multi-step research technology which require you to bring together multiple skill-sets, many of which may not be familiar to you. There is also a lot of help, with many textbooks, methods papers and training courses which you will be able to draw upon. Take advantage of this when planning your protocol, and get expert advice from SR specialists on how to conduct your systematic review.

**Tip:** If you intend to publish the results you should seriously consider publishing your protocol – an option afforded by an increasing number of systematic review journals.