

EPPI-Centre Evidence Tools, Products, and Projects

A series of webisodes from the Evidence for Policy and Practice Information and Co-ordinating (EPPI-Centre)

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Rapid reviews

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Systematic reviews

- Research reviews are a 'meta' level of research that aim to answer a research question by synthesizing the findings of existing research studies
- Systematic Reviews are a form of research review that is systematic and explicit about methods
- Systematic Reviews can address different research questions and use different methods

(3) *(See Webisode on dimensions of difference in reviews)*

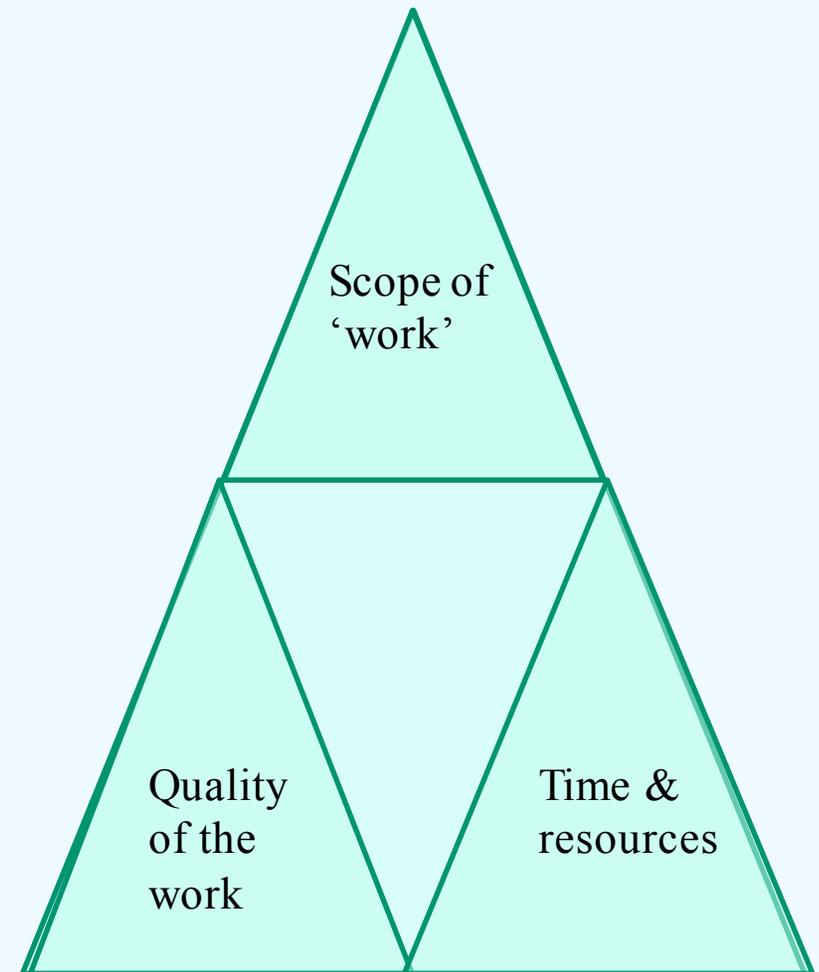
Variation in 'work done'* by a review

- Whatever the type of research question the focus and complexity of the question may vary.
- The complexity of a question has a number of dimensions including:
 - The population or participants
 - The contexts
 - The complexity of the phenomena either conceptually or practically
 - The type of data & answers required

*See Gough D, Thomas J, Oliver S. (2012) *Clarifying differences between review designs and methods*. *Systematic Reviews* 2012, 1:28.

Systematic review as a project

- The possibilities of a systematic review are determined by the three factors
 - The scope of the work
 - The quality required
 - The time and resources available
- Typically the broader and /or more complex the review research question and/or rigorous the review methods the longer it will take to complete a systematic review



Undertaking reviews rapidly

Many reasons why a review might need to be taken more rapidly. Most approaches either:

- 1. Increase speed by increasing resources whilst maintaining 'work done'
- 2. Reduce the complexity of review question (and thus the 'work done') by the review

AND/OR

- 3. Reducing rigour of the review process and reporting

Approaches 2 and 3 common as require fewer resources than approach 1

The common stages of a systematic review

Define review stakeholders and team



Formulate review question, conceptual framework and inclusion criteria (develop 'protocol')



Search for and identify relevant studies



Describe studies



Appraise included studies



Synthesise and appraise findings



Communicate and engage

The common stages of a systematic review - acceleration strategies

Define review stakeholders and team

Limit stakeholder engagement in range and methods

Formulate review question, conceptual framework and inclusion criteria (develop 'protocol')

Search for and identify relevant studies

Describe studies

Appraise included studies

Synthesise and appraise findings

Communicate and engage

The common stages of a systematic review - acceleration strategies

Define review stakeholder and team

Formulate review question, conceptual framework and inclusion criteria (develop 'protocol')

Focus on specific population, specific conceptual/practical definitions of phenomena reflected in tightly specified selection criteria

Search for and identify relevant studies

Describe studies

Appraise included studies

Synthesise and appraise findings

Communicate and engage

The common stages of a systematic review - acceleration strategies

Define review stakeholder and team

Formulate review question, conceptual framework and inclusion criteria (develop 'protocol')

Search for and identify relevant studies

Use fewer search sources; simpler search strings

Reduced QA e.g. single person screening; emphasis on 'clear fit' when selecting for inclusion

Describe studies

Appraise included studies

Synthesise and appraise findings

Communicate and engage

The common stages of a systematic review - acceleration strategies

Define review stakeholder and team

Formulate review question, conceptual framework and inclusion criteria (develop 'protocol')

Search for and identify relevant studies

Describe studies

Simplify data extraction to reduce information gained from individual studies; reduce QA e.g. single person data extraction

Appraise included studies

Synthesise and appraise findings

Communicate and engage

The common stages of a systematic review - acceleration strategies

Define review stakeholder and team

Formulate review question, conceptual framework and inclusion criteria (develop 'protocol')

Search for and identify relevant studies

Describe studies

Appraise included studies

Use more simple study quality assessment or none at all. If quality assessment used for selection make it very simple, reduce QA e.g. single person quality assessment.

Synthesise and appraise findings

Communicate and engage

The common stages of a systematic review - acceleration strategies

Define review stakeholder and team

Formulate review question, conceptual framework and inclusion criteria (develop 'protocol')

Search for and identify relevant studies

Describe studies

Appraise included studies

Synthesise and appraise findings

Use less complex methods of synthesis, less exploration and/or sensitivity analysis in the synthesis

Communicate and engage

The common stages of a systematic review - acceleration strategies

Define review stakeholders and team

Formulate review question, conceptual framework and inclusion criteria (develop 'protocol')

Search for and identify relevant studies

Describe studies

Appraise included studies

Synthesise and appraise findings

Communicate and engage

Use shorter and less complex reports following pre-structured templates

What is important to consider when deciding which acceleration strategies to use?

- Important to remain systematic and transparent whatever choice is made
- Each strategy has potential to ‘speed-up’ review process alone or in combination with others
- Each strategy has potential to introduce ‘more’ error or ‘bias’ into a systematic review. More strategies = more risk
 - e.g. fewer search sources increases risk of ‘not finding’ piece of relevant research
 - e.g. less complex quality assessment increases risk of not identifying where methods of a study are influencing results in a particular way
- Choice should be informed by all stakeholders’ views about which ‘risks’ are most important to them

General conclusions

- Systematic reviews maybe ‘accelerated’ in a number of ways.
- Evidence claims based on the review findings should be consistent with the limitations of the systematic review question and methods.
- Acceleration strategies are probably less ‘risky’ when the review research question can be very clear about the population, phenomena and data/ answers/ outcomes of interest.
- Complexity in any of these dimensions will increase the risk that acceleration strategies may reduce the utility of the review to provide a clear rigorous answer to review research question.

Follow up references

- Thomas J, Newman M, Oliver S. (2013) Rapid evidence assessments of research to inform social policy: taking stock and moving forward. *Evidence & Policy*. 9:5–27.
- Caird J, Sutcliffe K, Kwan I, Dickson K, Thomas J (2015) Mediating policy-relevant evidence at speed: are systematic reviews of systematic reviews a useful approach? *Evidence & Policy*, 11 (1) 81-97

Thank you



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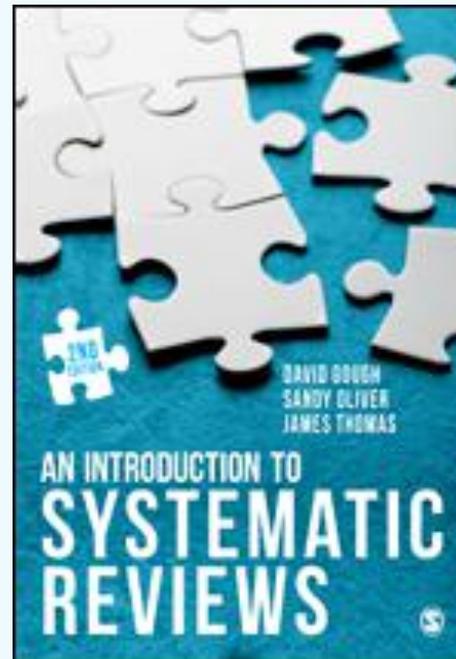
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Disclaimer

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