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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Systematic maps

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David Gough (EPPI-Centre, UCL)

The common stages of a systematic review

Form review team (involve 'users')

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

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Search for and identify relevant studies

↓

Describe studies

↓

Appraise included studies

↓

Synthesise and appraise findings

↓

Communicate and engage

Map

Synthesis

A two-phase systematic review

1. Systematic Map

↓

2. Systematic Research Synthesis

Maps implicit in the review process

- But not used explicitly
- Early examples of explicit use:

Peersman G (1996) A Descriptive Mapping of Health Promotion Studies in Young People, EPPI Research Report. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Gough, D. A., Kiwan, D., Sutcliffe, K., Simpson, D. and Houghton, N. (2003). A systematic map and synthesis review of the effectiveness of personal development planning for improving student learning. In: *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Purpose of coding of studies in a review

1. Management of studies through the review
2. Map the research field
3. Describe studies for critical appraisal
4. Identify findings for synthesis

Codes for mapping

Any variable that is of interest. For example:

- Bibliographic information
- Geography
- Research method
- Theory

Not usually study findings as there is no critical appraisal of the studies (and so could be misleading to examine the findings without such an appraisal)

Purposes of mapping 1: Describe the research field

- Describe the research field of the included studies
- The map of studies is defined by the review question (and thus the inclusion criteria) and may not reflect traditional academic topic areas (particularly if a non-academic user driven review)
- Clarifies what has been studied and how
- Clarifies possible gaps in what has been studied (gap maps)
- Can be useful products in their own right

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Purposes of mapping 2: Inform the focus of a synthesis

- On examining the map, the decision may be to synthesize only part of the map (i.e. narrow the inclusion criteria)
- The narrowing may be for:
  - Due to lack of resources
  - Some aspect of the included studies (such as too much heterogeneity);
  - A plan to wish to describe the wider literature as a context for a narrower synthesis
  - A plan to undertake a sequence of reviews on the wider topic

Purposes of mapping 3: to inform the synthesis process or its interpretation

- A map provides descriptive information on the literature defined by the review question. It thus can inform the nature of the synthesis.

- It provides a context for undertaking the synthesis and interpreting what evidence claims can be made from the included studies.

Some terminological confusion with mapping

- Some people use the term 'scoping' for mapping (but scoping can also mean a quick non-systematic review including synthesis)
- Some restrict maps to coding of particular types of variables but there need be no restriction on what is described about a research field
- Some use the term 'mega map' to refer to maps with broad inclusion criteria (broad map), but it can also be used to refer to maps which code on many variables (detailed map)

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Thank you

Website
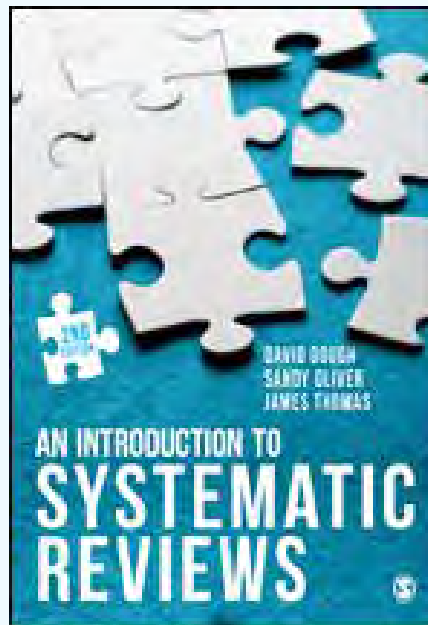EPPI-Centre Website http://eppi.ioe.ac.uk

Twitter
@EPPICentre
@ProfDavidGough

Email
david.gough@ucl.ac.uk

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EPPI-Centre
Social Science Research Unit
UCL Institute of Education
University College London
18 Woburn Square
London WC1H 0NR

Tel +44 (0)20 7612 6397
Fax +44 (0)20 7612 6400
Email eppi@ioe.ac.uk
Web eppi.ioe.ac.uk/

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