**Webisode 6 – Justifiable evidence claims**

Presenter: David Gough (EPPI-Centre, UCL)

EPPI-Centre Evidence Tools, Products, and Projects – A series of webisodes from the Evidence for Policy and Practice Information and Co-ordinating (EPPI) Centre. Hosted by AIR’s Center on Knowledge Translation for Disability and Rehabilitation Research (KTDRR).

**Slide 1: Cover slide**

EPPI-Centre Evidence Tools, Products, and Projects. A series of webisodes from the Evidence for Policy and Practice Information and Co-ordinating (EPPI) Centre.

Hosted by AIR’s Center on Knowledge Translation for Disability and Rehabilitation Research (KTDRR).

Copyright © 2018 American Institutes for Research (AIR). All rights reserved. No part of this presentation may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from AIR. Submit copyright permissions requests to the AIR Publications Copyright and Permissions Help Desk at [copyright\_PS@air.org](mailto:copyright_PS@air.org). Users may need to secure additional permissions from copyright holders whose work AIR included after obtaining permission as noted to reproduce or adapt materials for this presentation.

**Cover slide template:** dark blue background with white text and gray text. Gray bar at bottom with AIR logo on the left (gray and blue column on left; letters in blue, AIR (R) on the right; words below in blue, American Institutes for Research (R)). To the left of AIR logo, EPPI-Centre logo: A large blue script letter e to the left, with smaller black letters PPI to the right. Below PPI, in a smaller black box, is the word CENTRE in white text.

**Slide 2: Justifiable evidence claims**

February 2018. David Gough (EPPI-Centre, UCL).

**Title slide template:** Blue bar at top. On far left, Institute of Education. On the far right, UCL Logo: White image of Main Building with large white letters UCL to the right. In the center background, a photograph of London with title text superimposed over the image. White bar at the bottom: On far right, EPPI-Centre logo: A large blue script letter E to the left, with smaller black letters PPI to the right. Below PPI, in a smaller black box, is the word CENTRE in white text.

**Slide 3: Systematic reviews**

• Research reviews are a ’meta’ level of research that use the findings of existing studies to address research questions

• Reviews vary considerably in:

* the questions they address
* the methods they use
* the nature of the evidence claims (and the certainty and scope of application of such claims)

**Slide 4: Users of research engage with and interpret evidence claims of:**

• Primary research

• Reviews of research

• Recommendations based on research + further evidence: other types of research + policy or practice or users knowledge + contextual factors

**Slide 5: Research (review) questions vary**

• Type of question

• Perspectives, values and priorities

• The nature and extent of the research problem that the review attempts to address

•The use of theory and data in addressing that question

**Slide 6: Evidence claims of reviews: Appraising claims on the basis of:**

1. How the **review** was conducted

2. The **individual studies** used by the review

3. The nature of the **total evidence** identified

Appraisal includes not only trustworthiness and relevance of method. It also includes the relevance of the focus of a review and of studies included in a review.

**Slide 7: Dimension 1: Review method**

*Sub-dimensions:*

a) Methods standards achieved: how well was review undertaken methodologically?

b) Suitability of the review method: Is this an appropriate method for answering this review question?

c) Relevance to review focus: Is the way that the review is conducted appropriate for the specific focus of the review question?

*Example of components of appraisal instruments to assess Dimension 1:* AMSTAR: (a) Methodological quality

ROBIS: (a) Concerns with the review process; Risk of bias; (c) Relevance

**Slide 8: Dimension 2: Included studies**

*Sub-dimensions:*

a) Methods standards achieved: how well were the ‘included studies’ undertaken methodologically?

b) Suitability of the research methods of the ‘included studies’: Were these appropriate methods for answering this *review* question?

c) Relevance to review focus: Is the way that the ‘included studies’ were conducted appropriate for the specific focus of the *review* question?

*Example of components of appraisal instruments to assess Dimension 2:*

GRADE: (a) Study design; (a&b) Study limitations; (c) Indirectness

CERQUAL: (a&b) Methodological limitations; (c) Relevance

**Slide 9: Dimension 3: Evidence produced by the review**

*Sub-dimensions:*

a) Nature of the included studies: qualities of the evidence when considered together (such as heterogeneity, statistical independence).

b) Extent of evidence from the included studies: further to issues of quality maybe issues of the extent of evidence available to address the review question.

*Example of components of appraisal instruments to assess Dimension 3:*

GRADE: (a&b) Inconsistency; Imprecision; Publication bias; Magnitude of treatment effect; Impact of confounders; Dose /response

CERQUAL: (a) Coherence; (a&b) (b) Adequacy of data

*Example of components of appraisal instruments to assess Dimensions 2 & 3:*

Both GRADE and CERQUAL: Quality of evidence for each specific finding

**Slide 10: So how to assess whether an evidence claim fits your (decision support) needs?**

i. Is the evidence claim relevant to your decision (if so, in what way? What does it not cover?)

ii. Is it of sufficient methodological quality (1a, 1b, 2a,2b,3a)?

iii. Is it of sufficient relevance in terms of focus (1c, 2c)? Including alignment between the review question and method (for example, sample and focus of measures)?

iv. Is the evidence sufficient (3b + of actual or potentially available evidence)

**Slide 11: Sufficiency of evidence**

Evidence may be strong in terms of one study or even one review yet is this sufficient in terms of what could or should be studied?

How much of such evidence is sufficient for different decisions?

**\**

**Slide 12: Justifiable evidence claims to inform decisions**

Evidence claim

Justification for claim

* Review Method
* Included Studies
* Evidence produced

Consideration of evidence and decisions

* Interpretation & integration with other information

Application of decisions

Outcomes of decisions

**Slide 13: Thank you**

Website: EPPI-Centre Website [http://eppi.ioe.ac.uk](http://eppi.ioe.ac.uk/)

Twitter: @EPPICentre

Twitter: @ProfDavidGough

Email: David.gough@ucl.ac.uk

Picture of cover of An Introduction to Systematic Reviews (Cover reprinted with permission.)

Top right: IOE London logo. Leading education and social research. Institute of Education, University of London.

Image on right: London at night - the London Eye on left, bridge over River Thames center, Westminster Palace in background on right.

Contact information below image:

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/

**Slide 14**: **Disclaimer**

The contents of this presentation were developed by the EPPI-Centre for grant number 90DP0027 from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR). NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this presentation do not necessarily represent the policy of NIDILRR, ACL, HHS, and you should not assume endorsement by the Federal Government.

Bottom left AIR logo: gray and blue column on left; letters in blue, AIR (R) on the right; words below in blue, American Institutes for Research (R).