Is there any role for systematic/literature reviews in policy-oriented economic research?

Carlos Moreno- Leguizamon (Ph.D)

ICRIER
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Points

- **Research Synthesis**
  - **Systematic Reviews**
  - **Literature Reviews**
- **How to implement a Systematic Review/Literature Review**
  - **Five steps**
- **Dialogue, exploration**

Aim

The seminar will present and discuss some of the basic ways HOW systematic /literature reviews are formulated currently in the health sciences with the aim to trigger a **dialogue** with economists around the question of whether there is a role for systematic/literature reviews in policy-oriented economic research.

Disciplines

Economics	Health Sciences
Health economics Environmental economics Development economics	Biomedicine Nursing Physiotherapy Pharmacy Nutrition

Your ideas/experiences conducting

- Literature Reviews?
- Systematic Reviews?

Literature Review

http://www.youtube.com/watch?v=t2d7y_r65HU

History

Relevance , applicability and quality of RESEARCH	
Should research stay only within the research community?	Should research be disseminated to other stakeholders? Policy makers Practitioners Users
http://www.cochrane.org/ Prepares and disseminates Systematic Reviews of the effect of interventions in health care http://www.campbellcollaboration.org/ To help individuals to make well-informed decisions about education, criminal justice and social work and welfare	

Research Synthesis

It refers to the group of methods for summarizing, integrating, and where possible, cumulating the findings of different studies on a TOPIC or RESEARCH QUESTION.

Types:

- Narrative Reviews (qualitative data)
- Vote Counting Reviews (quantitative data)
- Meta-Analysis (quantitative data)
- **Systematic Reviews** (quantitative data)
- **Literature Reviews (Best Evidence review) (Q & Q)**
- Meta-Ethnography (qualitative data)

Characteristics

Systematic Reviews	Literature Reviews
• Primary research • Methodology: Quantitative • Control trials • Experimental/ • Observational research Social issues? Positivist (Epistemology) Evidence	• Primary research • Methodology: Quantitative & Qualitative? LINK to theory (epistemology) Positivist/ Phenomenological Critical/Postmodernist

The conduction of a Systematic Review/Literature Review

Step 1: Framing questions for a review

- The problems to be addressed by the review should be specified in the form of clear, unambiguous and structured questions before beginning the review work.

Research Questions: examples

- Can length of stay be reduced from 5 to 3 days in patients admitted with COPD, by facilitating early supported discharge?
- What is the role of screening tools in identifying vulnerable women antenatally?
- What tools are available for reviewing the nursing structure within contraception and sexual health services prior to change of organisation?

The conduction of a Systematic Review/Literature Review

Step 2: Identifying relevant work

- The search for studies should be extensive. Multiple resources (**both computerized and printed)** should be searched without language restrictions.

- The study selection criteria should flow directly from the review questions and be specified *a priori*. Reasons for **inclusion** and **exclusion** should be recorded

Matrix

Database	Key Words- used in various combinations	Number of Hits	Limits
Pubmed..			

PICO (INCLUSION AND EXCLUSION CRITERIA)

- Population: adults
- Intervention: group counselling
- Context: hospital smoking cessation clinic
- Outcome: giving up smoking

The conduction of a Systematic Review/Literature Review

Step 3: Assessing the quality of studies

- Study quality assessment is relevant to every step of a review.
- Selected studies should be subjected to a more refined quality assessment by use of general critical appraisal guides and design-based quality checklists.
- These detailed quality assessments will be used for exploring heterogeneity and informing decisions.

Resources

- http://www.sph.nhs.uk/what-we-do/public-health-workforce/resources/critical-appraisals-skills-programme

The conduction of a Systematic Review/Literature Review

Step 4: Summarizing the evidence

- Data synthesis consists of tabulation of study characteristics, quality and effects as well as use of research methods for exploring differences between studies.

TABLE/MATRIX

Research question:

	THEORY	METHODOLOGY		FINDINGS	VOICE
Author	Any theoretical points	Research Methods Qualitative Quantitative Both	Research Context Sample	Main results or outcomes achieved	YOUR VIEW
	Theories Epistemology Positivism Critical theory Phenomenology				

The conduction of a Systematic Review/Literature Review

Step 5: Interpreting the findings

- The issues highlighted in each of the four steps above should be met.
- The risk of publication bias and related biases should be explored.
- Any recommendations should be graded by reference to the strengths and weaknesses of the evidence

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4 TYPE OF CONCLUSIONS IN A LITERATURE REVIEW (LR)

- Based on the evidence presented by the LR the question is appropriate.

  many studies……conclusion is appropriate

- Although the research question cannot be proved by the LR, it is the best guess

  Flaws/inconsistencies……..conclusion is appropriate

4 TYPE OF CONCLUSIONS IN A LITERATURE REVIEW (LR)

- Evidence is lacking to know if the research question is appropriate or inappropriate

  many studies……lack of evidence

- The research question is not valid

Methodological convergence

High diversity of methods is a healthy approach to research

None method is perfect

Diversity better than quantity: Examples

- Questionable study: 50 studies (one method) one conclusion
- Acceptable study: 5 studies (diverse methods) one conclusion

Common mistakes

- Inadequate coverage of evidence (details)
- Lack of integration (theory)
- Lack of critical appraisal (weaknesses and flaws of evidence/ bias critiquing evidence)
- Failure to adjust conclusions (sweeping conclusions)

Common mistakes

- Assertion versus evidence (idea/evidence)
- Selective review of evidence (my argument/other's argument)
- Evidence and counter-evidence
- Focus on the research rather than the researcher
- Future implications

DIALOGUE

THANK YOU!!

GRACIAS!!