

Online Workshop: Qualitative Research Synthesis

Session 1: Introduction to Reviewing and Synthesizing Qualitative Evidence

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Masterclass on Qualitative Evidence Synthesis Introduction Session

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A fairly short, reasonably cheap introduction to QES

- How did I got triggered by qualitative evidence synthesis?
- What is qualitative research and what sort of evidence does it generate?
- How can qualitative research contribute to treatment effectiveness reviews?
- How is a qualitative evidence synthesis different from a review of effectiveness?
- What (general) approaches can be used?
- What does a qualitative review protocol look like?



HOW DID I GET TRIGGERED BY QUALITATIVE EVIDENCE SYNTHESIS?

Meet Emma

Born the 6th of October 2010



Meet Emma

Born the 6th of October 2010 Little sister of Door and Polle

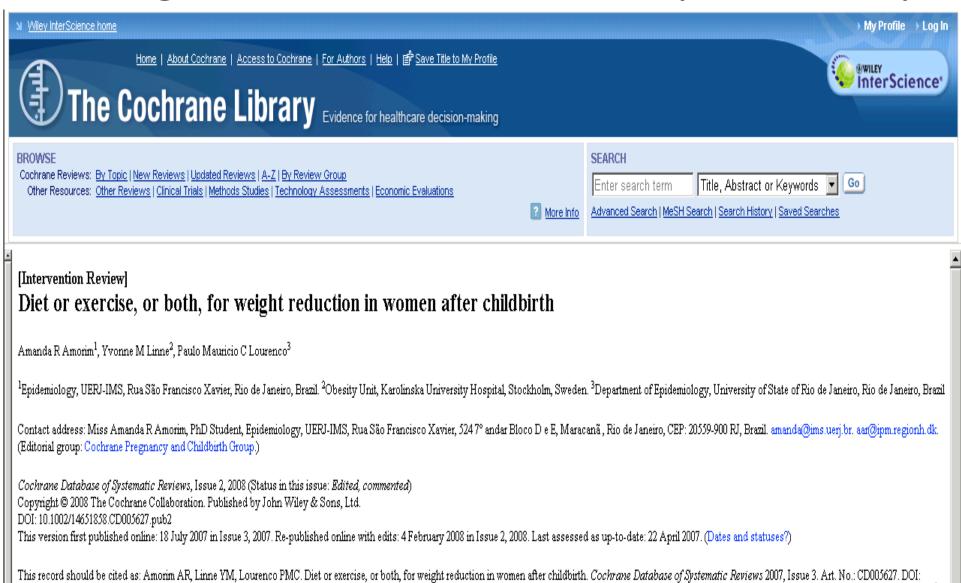




If you don't know the answer to your question

Where would you go look for it?

You'd go to the Cochrane or Campbell Library!



10.1002/14651858.CD005627.pub2.

- Women who exercised did not lose significantly more weight than women in the usual care group.
- Women who took part in a diet or diet plus exercise program, lost more weight than women in the usual care.
- There was no difference in the magnitude of weight loss between diet and diet plus exercise group.
- The interventions seemed not to affect breastfeeding performance adversely.

- Women who exercised did not lose significantly more weight than women in the usual care group.
- Women who took part in a diet or diet plus exercise program, lost more weight than women in the usual care.
- There was no difference in the magnitude of weight loss between diet and diet plus exercise group.
- The interventions seemed not to affect breastfeeding performance adversely. A study in the Journal of the American

College of Nutrition found that those who ate cereals were lower in weight compared to those who ate meat and eggs, bread or skipped breakfast.

SIMPLE logical reasoning:

- IF a diet helps to lose weight after pregancy
- IF cereals have proven to work well as a diet

SIMPLE logical reasoning:

- IF a diet helps to lose weight after pregancy
- IF cereals have proven to work well as a diet
- THEN the consumption of cereals will lead to weight loss after pregnancy!
- Right?

Wrong effect! And then you panic



Wrong effect! And then you panic





You'd go and dig a little deeper...

Weight, Diet, and Physical Activity-Related Beliefs and Practices Among Pregnant and Postpartum Latino Women: The Role of Social Support

Pamela L. Thornton, Edith C. Kieffer, Yamir Salabarría-Peña,
Angela Odoms-Young, Sharla K. Willis, Helen Kim,
and Maria A. Salinas

Weight Loss Programs for Urban-based, Postpartum African-American Women: Perceived Barriers and Preferred Components

Rosanna Setse · Ruby Grogan · Lisa A. Cooper · Donna Strobino · Neil R. Powe · Wanda Nicholson

You'd go and dig a little deeper...

Study 1 (Thornton)

- Husbands and female relatives were the primary sources of emotional, instrumental and informational support.
- Holistic health beliefs and the opinions of others strongly influenced the mothers in their perception about the need to remain healthy.
- Absence of mothers, female relatives, friends to do child care, companionship for exercise and advice about food were barriers limiting women's ability to maintain healthy practices

You'd go and dig a little deeper...

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Study 2 (Setse)

- Postpartum depression
- Desire to lose weight
- Cost of weight programs
- Negative impact of media covering celebrity post partum weight loss
- Family behaviors that promote unhealthy eating
- Impact of child care facilities on ability to exercise

You'd go and dig a little deeper

Conclusion study 1 (Thornton)

We need community-based, family oriented programs to increase the chance of successful weight reduction.

Conclusion study 2 (Setse)

Weight loss interventions should address the psychological effects of childbearing, affordability and perceptions of body image. They should incorporate family-centred approaches.

WHAT IS QUALITATIVE RESEARCH AND WHAT SORT OF 'EVIDENCE' DOES IT GENERATE?

Evidence of effectiveness

'It is surely a great criticism of our profession that we have not organised a critical summary,..., adapted periodically, of all relevant randomised controlled trials'

Archie Cochrane



'It is surely a great
criticism of our
profession that we have
been foolish enough to
think that critical
summaries of relevant
randomised controlled
trials would provide us
with the right answer
for each type of query'



Karin Hannes

• Evidence of 'effectiveness': the extent to which an intervention, when used appropriately, achieves the intended effect.

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- Evidence of 'feasibility': the extent to which an intervention is practical and practicable, whether or not an intervention is physically, culturally or financially practical or possible within a given context.
- Evidence of 'appropriateness' the extent to which an intervention fits with a situation, how an intervention relates to the context in which it is given.
- Evidence of 'meaningfulness': the extent to which an intervention is positively experienced by the population and relates to the personal experience, opinions, values, beliefs and interpretations of the population.

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Evidence about
Cost-benefits
Lived experiences of a certain condition, situation
What people value or not



WHAT IF HE HAD THOUGHT ABOUT

...organising a critical summary,..., adapted periodically, of all relevant qualitative research studies?



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Mixed method reviews

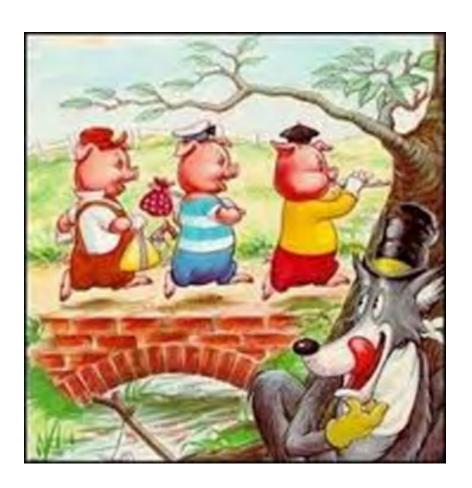


Mixed method reviews

Of course it mixes apples and oranges. In the study of fruit nothing else is sensible. Comparing apples to oranges is the only endeavor worthy of true scientists. Comparing apples to apples is trivial. (Gene Glass, 2000)



Qualitative research



Qualitative research in its most basic form

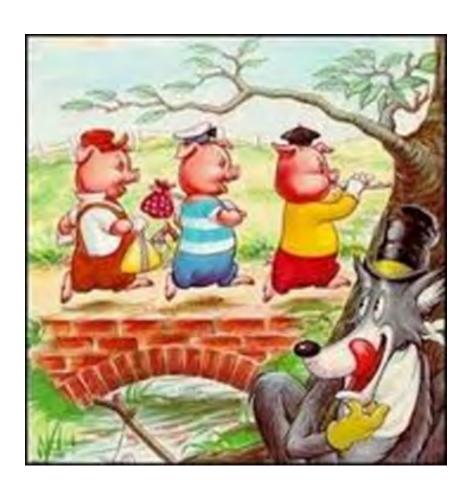
is research investigating the way in which people make sense of their ideas and experiences

The what

The why

The how

Qualitative research



Qualitative research in its most basic form

is research investigating the way in which people make sense of their ideas and experiences

The what

The why

The how

The search for MEANING (instead of factual information)

Developing a more complex picture of a phenomenon or situation.

Many Community Integration programs show positive results and should be studied more rigorously. To further establish that post-acute TBI rehabilitation interventions improve CI, future studies should include...

- intervention strategies based on injury severity,
- a control group,
- longer term follow-up

Display Settings: Abstract

S

Am J Occup Ther. 2010 Sep-Oct;64(5):709-19.

Effectiveness of rehabilitation in enhancing community integration after acute traumatic brain injury: a systematic review.

Kim H1, Colantonio A.

Author information

"Oh, that's too bad. Something hit his head, it won't heal, he's gone nuts,"

"It's like, if I'm on an Olympic running team and I have a small injury, yet I go back to that group. The need, the expectation is there."

- It is essential that professionals know the pre-morbid characteristics of the adolescents
- The program needs to go beyond the physical symptoms.
- Social role recovery should be considered an important component of such programs.

Social inclusion of persons with moderate head injuries: The points of view of adolescents with brain injuries, their parents and professionals

A cross sectional study by Carpenter, Forwell, Jongbloed, and Backman (2007) indicates that life satisfaction is more strongly related to community participation than impairment and activity limitations.



Barriers and facilitators

[Video - PhotoVoice: Advocacy through Photography]

(Community Participation after Spinal Cord Injury, N. Charleston, SC - 7/28/08)

Used with permission of Susan D. Newman

Qualitative Evidence Synthesis defined

A process of summarizing qualitative research findings, by comparing and analysing textual, visual or other research evidence derived from multiple accounts of an event, phenomenon or situation as reported in basic qualitative research studies.

Explore questions such as

- How do people experience a condition, situation?
- Why does an intervention work (or not), for whom and in what circumstances...?
- What are the barriers and facilitators related to a program?
- What impact do specific barriers and facilitators have on people, their experiences and behavior?

Qualitative evidence synthesis defined

'The process or result of building up separate elements, especially ideas, into a connected whole, especially a theory or system' (Oxford English Dictionary)

"A systematic empirical inquiry into meaning"

Systematic

- Planned
- Ordered/ structured

 "Reconstructed logic of science"

Empirical

- Depends upon the world of experience.
- Builds on what we can capture with our senses.

Shank, 2006

Inquiry into meaning

- Developing a more complex picture of a phenomenon or situation.
- Rich, Deep,
 Thick, Textured,
 Insightful, ...

HOW CAN QUALITATIVE RESEARCH CONTRIBUTE TO TREATMENT EFFECTIVENESS REVIEWS?

Contribution to treatment effectiveness reviews

- Contribute to the understanding of heterogeneity in outcomes
- Provide a research-based context for interpreting and explaining trial results
 - How to achieve change (more effectively)?
 - How to improve interventions?
 - How to 'fit' subjective needs?
 - What other type of interventions might be needed?
- Provide evidence on the subjective experience of those involved in developing, delivering and receiving an intervention or living with a particular condition or in a specific environment
- Reveal the extent to which effective interventions are actually adopted in policies and practice

Contribution to treatment effectiveness reviews

Qualitative research can contribute to Cochrane Intervention reviews in four ways:

- **informing reviews** by using evidence from qualitative research to help define and refine the question, and to ensure the review includes appropriate studies and addresses important outcomes;
- enhancing reviews by synthesizing evidence from qualitative research identified whilst looking for evidence of effectiveness;
- extending reviews by undertaking a search to specifically seek out evidence from qualitative studies to address questions directly related to the effectiveness review; and
- **supplementing reviews** by synthesizing qualitative evidence within a standalone, but complementary, qualitative review to address questions on aspects other than effectiveness.

Drivers for



- Greater recognition of the value of qualitative research in evidence-based policy
- 'Empty' reviews
- Public perspectives and experiences
- Systematic reviews of complex interventions
- Issues of process and implementation
- Extension of evidence-based health care to other areas of public policy
- Growing tradition for integration in primary research (mixed methods research)
- Dedicated research funding for methodological research
- Establishment of dedicated methods groups (e.g. Cochrane Qualitative Methods Research Group)

HOW IS A QUALITATIVE EVIDENCE SYNTHESIS DIFFERENT FROM A REVIEW OF EFFECTIVENESS?







The aggregative versus the configurative discourse

CONCEPTUALISATION OF SYSTEMATIC REVIEWS

Metaphor honestly stolen from Gough and Thomas, 2012

Conceptualisation of reviews

 Meta-analysis: Statistically pooling the results from individual studies addressing a similar topic, in order to create a more robust and trustworthy effect measure.

AGGREGATION



Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases (Review)

Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, Odgaard-Jensen J, Johansen M, Aja GN, Zwarenstein M, Scheel IB



Assess the effectiveness to LHW programme implementation.



Lay health workers can increase immunisation uptake in children < 5 years old

				CC	cc		
Study or Subgroup	log[CC]	SE	Weight	IV, Random, 95% Cl	IV, Random, 95% CI		
Barnes 1999	0.0099	0.1963	6.9%	1.01 [0.69, 1.48]			
Gokcay 1993	-0.0202	0.1113	14.0%	0.98 [0.79, 1.22]			
Johnson 1993	0.3074	0.0912	16.8%	1.36 [1.14, 1.63]			
Krieger 2000	0.4382	0.098	15.8%	1.55 [1.28, 1.88]			
LeBaron 2004	0.0861	0.07	20.0%	1.09 [0.95, 1.25]	+-		
Rodewald 1999	0.2546	0.0237	26.5%	1.29 [1.23, 1.35]	-		
Total (95% CI)			100.0%	1.23 [1.09, 1.38]	•		
Heterogeneity: Tau² =	= 0.01; Chi ^a	0.5 0.7 1 1.5 2					
Test for overall effect:	Z = 3.42 (1	Favours Control Favours Intervention					

Conceptualisation of reviews

Configuration



- Arrange or configure the findings from primary studies in order to generate new theory or explore the salience of existing theory in particular situations.
- Piecing together research knowledge from different contexts.

Conceptualisation of reviews The importance of **context**

TEXT MESSAGE:

**Honey, I'm running
late - please put the
chicken on the stove.
Love you!**



Conceptualisation of reviews The importance of **context**

TEXT MESSAGE:

**Honey, I'm running
late - please put the
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Love you!**



Cynthia Lum, 2011



Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis (Review)

Glenton C, Colvin CJ, Carlsen B, Swartz A, Lewin S, Noyes J, Rashidian A



Identify barriers and facilitators to LHW programme implementation.

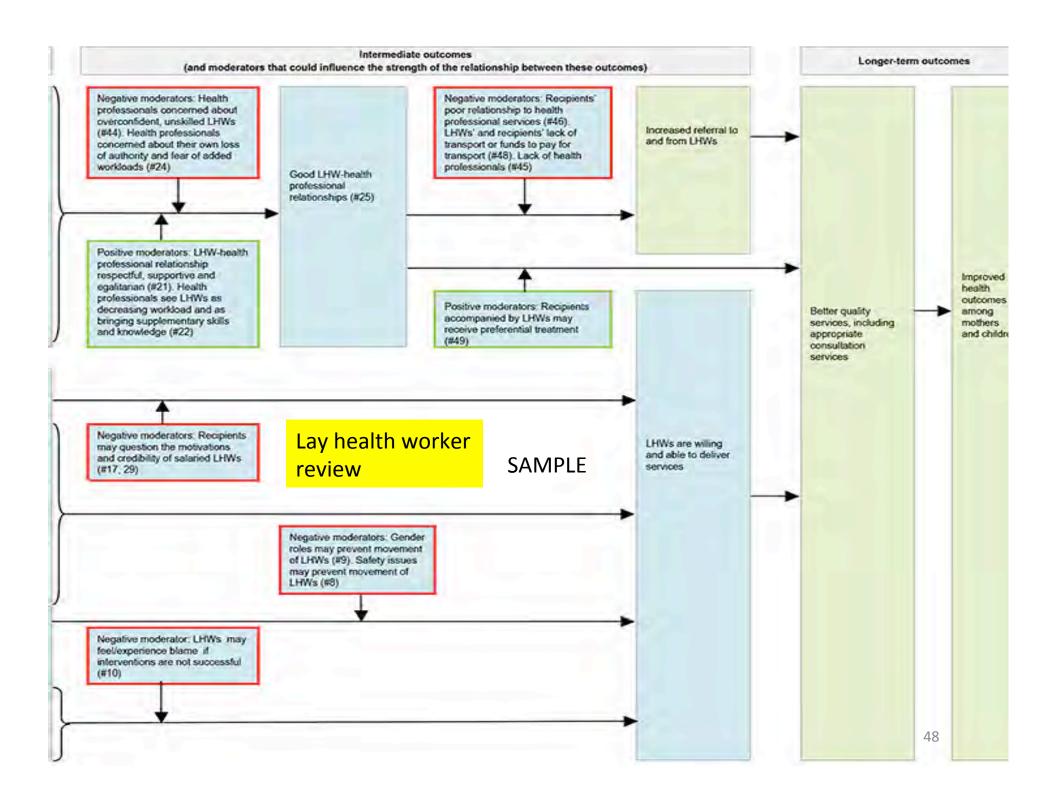


- Programme acceptability, feasibility, appropriateness
 - Lay health worker relationship with health professionals
 - Lay health worker motivation and incentives
 - Lay health worker training, supervision and working conditions
 - Patient flow process
 - Service integration
 - Social-cultural conditions

Programme acceptability, appropriateness and feasibility: The lay health worker-recipient relationship I

√IPLE

1.	Both programme recipients and LHWs emphasised the importance of trust, respect, kindness and empathy in the LHW-recipient relationship.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.		
2.	Recipients appreciated the similarities they saw between themselves and the LHWs.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.		
3.	Some LHWs expressed an appreciation of the community- based nature of the programmes, which allowed them a certain amount of flexibility in their working hours.	Low certainty	The studies were of moderate quality. However, the finding is only from two studies in Uganda and Nepal.		
4.	LHWs were compared favourably with health professionals, whom recipients often regarded as less accessible, less friendly, more intimidating, and less respectful.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.		
5.	Some recipients who had easy access to doctors indicated a preference for these health professionals.	Low certainty	The studies were of moderate quality. However, the finding is only from two studies in Thailand and Bangladesh.		
6.	LHWs reported difficulties in managing emotional relationships and boundaries with recipients.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.		



The role of QES in SR: different aims

Meta-analysis

Meta-synthesis

Nature Quantitative Qualitative

Aim Accumulating Make sense of data

Studies Strictly comparable Basic comparability

Result More power Added value in content

Synthesis Through data Through interpretation

WHAT GENERAL APPROACHES CAN BE USED?

Conceptualisation of qualitative evidence synthesis



The method is related to the **purpose** of the review

- Bring together separate findings into an interpretive explanation that is greater than the sum of the parts (meta-ethnography)
- Critically approach the literature in terms of deconstructing research traditions or theoretical assumptions (critical interpretive synthesis)
- Produce theories or models that are based on phenomena involving processes of contextualised understanding and action (grounded theory)
- Respond to a review need for evaluating an intervention's appropriateness, acceptability and effectiveness (thematic analysis)
- Summarize evidence in order to develop lines of action for practice and policy (meta-aggregation)
- Unpicking the mutually interdependent relationships between persons and environments, by formulating patterns 'With this intervention, these outcomes occur with these population foci and in these settings (ecological triangulation)
- Bring together research of widely different designs and paradigms (metanarrative)

Epistemological arguments

Qualitative Inquiry

Qualitative Science

Idealist

Realist

Meta- narrative	Critical interpretive synthesis	Meta-ethno- graphy	Grounded theory	Thematic synthesis	The JBI meta- aggregative approach	Framework synthesis	Ecological triangulation
Subjective idealism	Subjective idealism	Objective idealism	Objective idealism	Critical realism	Critical realism	Critical realism	Scientific realism

There is no shared reality independent of multiple alternative human constructions

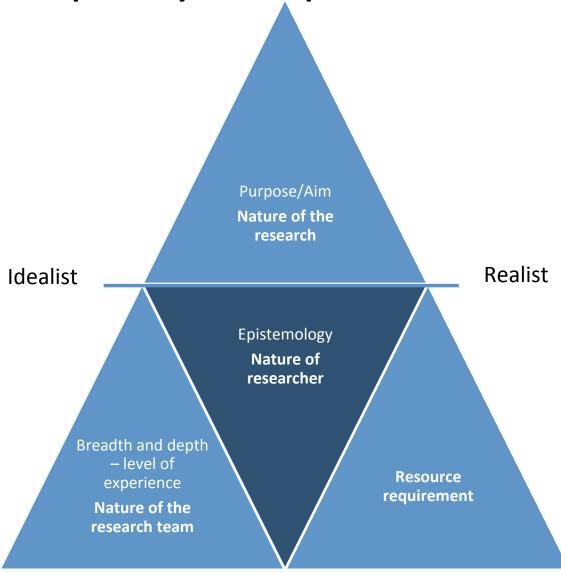
There is a world of collectively shared understandings:

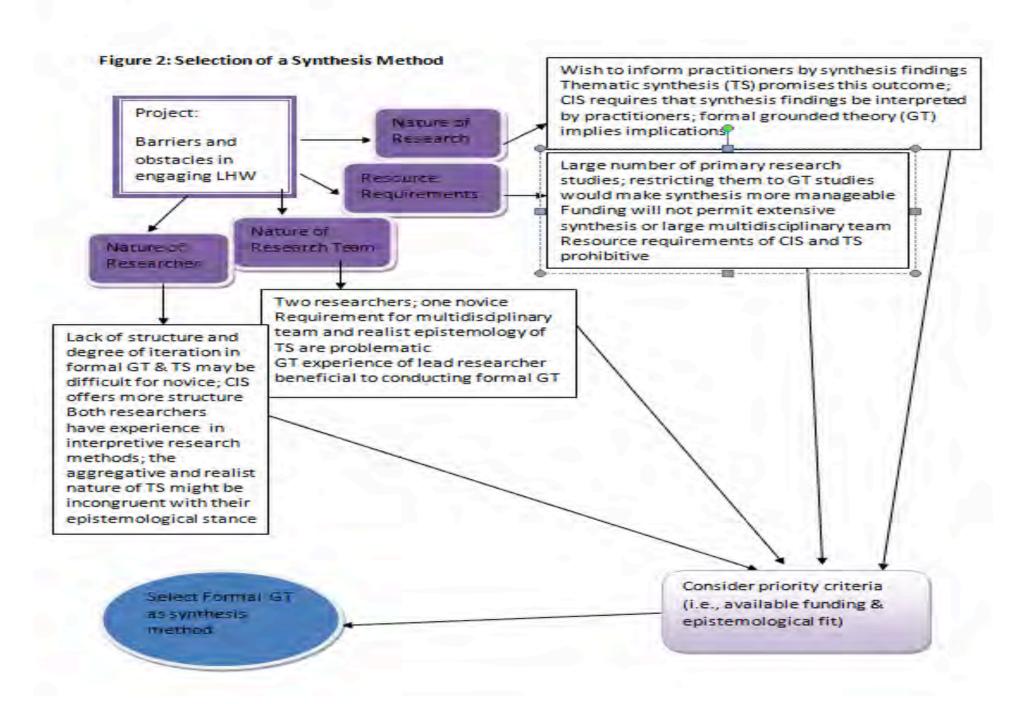
Knowledge of reality is mediated by our perceptions and beliefs

It is possible for knowledge to approximate closely an external reality

Spencer, 2003

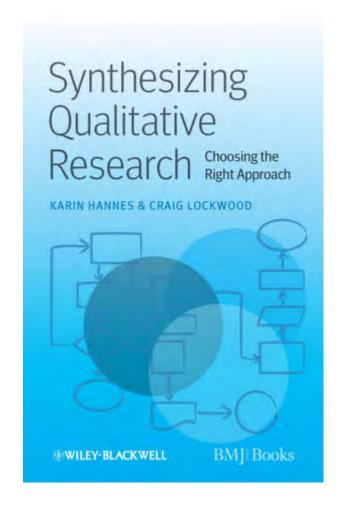
Choosing the right approach to inform policy and practice?





Qualitative Evidence Synthesis guidance

- Guidance is on the CQIMG website
 - Methods to synthesize and integrate qualitative evidence
 - http://cqimg.cochrane.org/ supplemental-handbook-guidance
- Mailbase for questions/discussion
 - asqus@jiscmail.ac.uk
- Methodological support for Cochrane or non-Cochrane related QES by KU Leuven researchers based on personal interests (co-authoring)





Thank you for participating!

We invite you to:

- Provide your input on today's session
- Share your ideas for future sessions
- Participate in the Community of Practice to continue the dialogue
- PLEASE CONTACT:

joann.starks@sedl.org

Please fill out the brief Evaluation Form: www.surveygizmo.com/s3/1802192/QualSynth-1



Disclaimer

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