

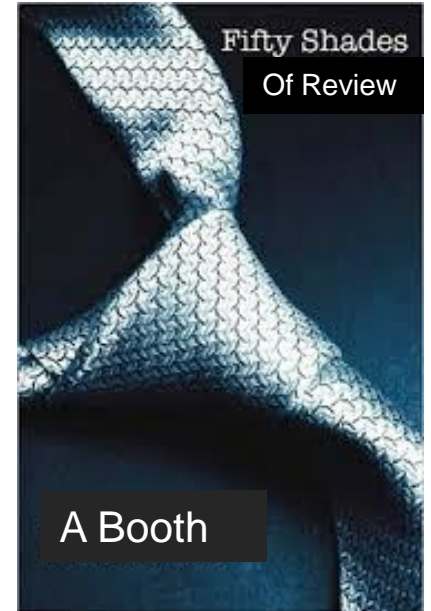
Fifty Shades of Review

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European Association for Health Information and Libraries
<http://eahil.eu/>



23/11/2016

A PARABLE

In the beginning....
there was a single
product....And choice
was simple!



Another PARABLE

In the beginning....
there was a single
product....The
“Cochrane Review” And
choice was simple!



FOR CoCA COLA READ COCHRANE COLLABORATION

By Time

By Purpose

By Type of included
studies

By producing Organisation

By Type of synthesis

REVIEW BRANDS

Scoping review

Mapping Review

Rapid evidence assessment

Rapid review

Rapid realist review

Review of reviews

Umbrella review

Cochrane review

Qualitative evidence
synthesis

Meta-analysis

Meta-narrative

Meta-ethnography

Realist review

Critical interpretive
synthesis

“Only a handful of review types possess prescribed and explicit methodologies and **many of the labels used fall short of being mutually exclusive**. In lieu of internationally recognized review definitions, the typology reported here acknowledges that **there is a lack of unique distinguishing features for the most common review types**, whilst highlighting that **some common features do exist**”. **Grant & Booth (2009)**



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The Review “Family Trees”

1. Traditional Reviews Family
2. Systematic Reviews Family
3. Rapid Reviews Family
4. Qualitative Systematic Reviews Family
5. Mixed Methods Reviews Family
6. Purpose Specific Review Family



Traditional Review “Family”

Narrative Review

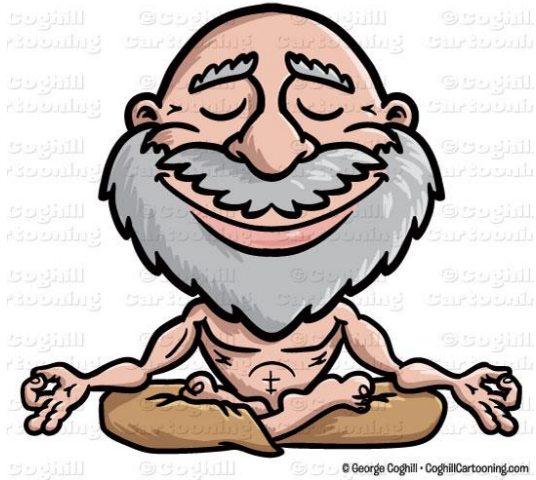
Narrative Summary

Critical Review

Editorial Review

State of the Art Review

Integrative Review



The Guru

Resources for Traditional Reviews

Table 2. The Research Stages in Conducting a Literature Review

Stage Characteristics	Research stage				
	<i>Problem formation</i>	<i>Data collection</i>	<i>Data evaluation</i>	<i>Analysis and interpretation</i>	<i>Public presentation</i>
Research questions asked	What evidence should be included in the review?	What procedures should be used to find relevant evidence?	What retrieved evidence should be included in the review?	What procedures should be used to make inferences about the literature as a whole?	What information should be included in the review report?
Primary function in review	Constructing definitions that distinguish relevant from irrelevant studies.	Determining which sources of potentially relevant sources to examine.	Applying criteria to separate “valid” from “invalid” studies.	Synthesizing valid retrieved studies.	Applying editorial criteria to separate important from unimportant information.
Procedural differences that create variation in review conclusion	1. Differences in included operational definitions. 2. Differences in operational detail.	Differences in the research contained in sources of information.	1. Differences in quality criteria. 2. Differences in the influence of non-quality criteria.	Differences in the rules of inference.	Differences in guidelines for editorial judgment.
Sources of potential invalidity in review conclusions	1. Narrow concepts might make review conclusions less definitive and robust. 2. Superficial operational detail might obscure interacting	1. Accessed studies might be qualitatively different from the target population of studies. 2. People sampled in accessible studies might be	1. Nonequality factors might cause improper weighting of study formation. 2. Omissions in study reports might make conclusions unreliable.	1. Rules for distinguishing patterns from noise might be inappropriate. 2. Review-based evidence might be used to infer causality.	1. Omission of review procedures might make conclusions irreproducible. 2. Omission of review findings and study procedures might make conclusions obsolete.

Byrne, J. A. (2016). Improving the peer review of narrative literature reviews. *Research Integrity and Peer Review*, 1(1). doi:10.1186/s41073-016-0019-2

Randolph, J. J. (2009). A guide to writing the dissertation literature review. *Practical Assessment, Research & Evaluation*, 14(13), 1-13.

Whittemore, R., & Knafl, K. (2005). The integrative review: updated methodology. *Journal of advanced nursing*, 52(5), 546-553.

Systematic Review “Family”

- Systematic Review of Effectiveness
- Review Protocol
- Review of Reviews/ Overview
- Umbrella Review
- Meta-Analysis
- Comparative Effectiveness Review
- Diagnostic System Review
- Review of Economic Evaluations
- Systematic Review of Epidemiology Studies

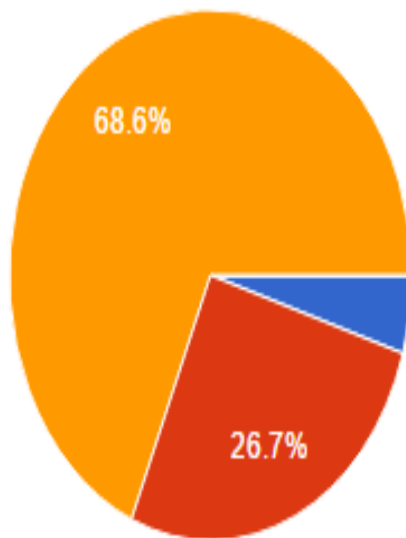


**The
Academic**



1. Why is a systematic review considered the most rigorous type of review?

(105 responses)



- Because, by taking more time over the review, you produce a better quality review product.
- Because, by searching more databases, you are more confident that you have found all the relevant...
- Because, by taking steps to minimise bias, you have more confidence in...
- Because, by spending more money on the review, you are more likely t...

1. Why is a systematic review considered the most rigorous type of review?

Last (*Dictionary of Epidemiology, Fourth Edition, 2001*)

*SYSTEMATIC REVIEW “The application of strategies that **limit bias** in the assembly, critical appraisal, and synthesis of all relevant studies on a specific topic. Meta-analysis may be, but is not necessarily, used as part of this process”.*

- More Time ≠ Better Quality
- Searching more databases does not make a better review [**More included articles are missed by a typical MEDLINE search (55% misses circa 30%) than by not searching other databases (misses circa 15%)**]
Diverse databases better than more databases. Plus non-database sources.
- More Money ≠ Better Quality

Call myself a librarian? Here are the missing references!

Research:

Halladay, C. W., Trikalinos, T. A., Schmid, I. T., Schmid, C. H., & Dahabreh, I. J. (2015). Using data sources beyond PubMed has a modest impact on the results of systematic reviews of therapeutic interventions. *Journal of clinical epidemiology*, 68(9), 1076-1084.

Correspondence and Results of Pilot Study :

Booth A. Over 85% of included studies in systematic reviews are on MEDLINE. *J Clin Epidemiol*. 2016 Apr 20. pii: S0895-4356(16)30073-7. doi: 10.1016/j.jclinepi.2016.04.002. [Epub ahead of print] PubMed PMID: 27107880.

Systematic Review

Definition: a review of a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant research and to collect and analyse data from the studies that are included in the review.

When to Use it: When seeking the best currently available answer to a narrowly-focused question using pre-defined methods and study types to support decision-making, further research or both.

Example: Any review from the Cochrane Library

Resources:

Centre for Reviews & Dissemination (CRD). (2009). *Systematic reviews: CRD's guidance for undertaking reviews in health care*. Centre for Reviews and Dissemination.

Higgins JPT, Green S (editors). *Cochrane Handbook for Systematic Reviews of Interventions* Version 5.1.0 [updated March 2011]. The Cochrane Collaboration, 2011. Available from www.handbook.cochrane.org.

Systematic Review Process

1. Stating the objectives of the research
2. Defining eligibility criteria for studies to be included;
3. Identifying (all) potentially eligible studies;
4. Applying eligibility criteria;
5. Assembling the most complete data set feasible, including,
 - a. data extraction;
 - b. quality appraisal of included studies;
6. Analyzing this data set, using statistical synthesis and sensitivity analyses, if appropriate and possible; and
7. Preparing a structured report of the research.

Overview of Reviews

Definition: use explicit and systematic methods to search for and identify multiple systematic reviews on a similar topic for the purpose of extracting and analyzing their results across important outcomes..

When to Use it: When seeking the best currently available answer to a narrowly-focused question where two or more systematic reviews have already been conducted.

Example: Flodgren, G. et al. (2011). An overview of reviews evaluating the effectiveness of financial incentives in changing healthcare professional behaviours and patient outcomes. Cochrane Library. doi:10.1002/14651858.cd009255

Resources:

Smith, V., et al. (2011). Methodology in conducting a systematic review of systematic reviews of healthcare interventions. *BMC Medical Research Methodology*, 11(1). doi:10.1186/1471-2288-11-15

Higgins JPT, Green S (editors). *Cochrane Handbook for Systematic Reviews of Interventions* Version 5.1.0 [updated March 2011]. The Cochrane Collaboration, 2011. Available from www.handbook.cochrane.org. Chapter 22 - Overview of Reviews

Rapid Review “Family”

Rapid Review
Rapid Evidence Assessment
Evidence Brief
Evidence Inventories
Rapid Response
Scoping Review
Mapping Review/Evidence Map
Rapid Realist Synthesis

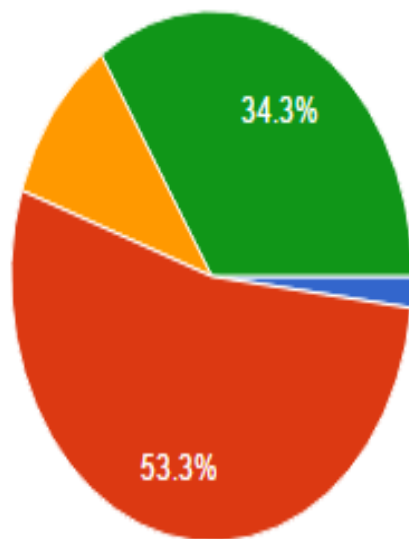


The Runner



2. Which of the following statements best describes a rapid review?

(105 responses)



- A review that is less expensive than a systematic review.
- A review that takes less time than a systematic review.
- A review that searches three databases or less.
- A review that is adapted to the specific needs of those who have commissioned the review.

2. Which of the following statements best describes a rapid review?

You can only perform a review rapidly if:

- (i) You have a detailed knowledge of the users' requirements
- (ii) They have a detailed understanding of the methods you are using and their likely bias
- (iii) You have good continuous communication around important review decisions

An RR could actually be MORE expensive than an SR IF the same quality is expected within a reduced time period (e.g. a larger review team)

An RR on average takes less time than an SR BUT an RR could take up to six months, an SR could take as low as three months. An RR may try to answer more questions than an SR.

One possible short cut is to search fewer databases than an SR. However a mapping review (type of RR) could search the same number of databases (or even more!) but take shortcuts elsewhere in the review process. SRs tend to search 3-4 databases *on average*.

Characterising Rapid Reviews

One main difference between RRs and standard SRs was the relationship with the end user. RRs relied on close relationships with end users, addressing specific decisions within preset time frames. Ongoing communication and the focused nature of the questions led to a wide range of methods.

Considerations for RRs include: nature of the decision; relationship with the end user; need for skilled and experienced staff; capacity to mobilize skilled staff quickly; and acceptance of modified systematic review methods. Limitations of RR methods, particularly potential biases and shortcomings, need to be clearly reported. (Hartling et al, 2016)

RR is not just a “mini systematic review with corners cut” - contextual factors, such as a close and iterative dialogue with end users to ensure fitness-for-purpose, influence the developed rapid product.

The complexity of the question(s) posed, the nature and volume of the evidence, the decision-making context, and the user’s time frame greatly influence the final RR.

Three approaches to Rapid Review

Accelerated Rapid Reviews

- “Throw” more resources/people at the review e.g. instead of using two reviewers use six reviewers (More input, same quality)
- Work “smarter” e.g. use technology to manage the review process e.g. data mining/relevance ranking for sifting process (Less input, same quality)

Abbreviated Rapid Reviews

- Design RR with methodological “short cuts” e.g. less databases, one reviewer doing what two would do, light touch quality assessment etcetera
- **Key Resource:** Rapid Reviews Wiki <https://rapid-reviews.info/>

Scoping Review

Definition: Aims “to map key concepts underpinning a research area and the main sources and types of evidence available”, to provide a “preliminary assessment of the size and scope of the literature”, and to contextualize knowledge; identifying what we know and do not know, and then setting this within policy and practice contexts”

When to Use it:

- 1 to examine the extent, range, and nature of research activity;
- 2 to determine the value of undertaking a systematic review;**
- 3 to summarize and disseminate research findings; and
- 4 to identify research gaps in the existing literature.

Example: Khanassov V, et al. Organizational interventions improving access to community-based primary health care for vulnerable populations: a scoping review. *Int J Equity Health*. 2016 Oct 10;15(1):168.

“Our results suggest the limited breadth of research in this area, and that it will be feasible to conduct a full systematic review of studies”

Resources:

Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol*. 2005;8(1):19–32.

Peters MD et al. Guidance for conducting systematic scoping reviews. *Int J Evid Based Healthc*. 2015 Sep;13(3):141-6. doi: 10.1097/XEB.0000000000000050.

Mapping Review/Evidence Map

Definition: Does not aim to answer a specific question (cp. systematic review), but instead collates, describes and catalogues available evidence (e.g. primary, secondary, quantitative or qualitative) relating to a topic of interest. Included studies can be used to develop a greater understanding of concepts, identify evidence for policy-relevant questions, knowledge gaps, and knowledge clusters (subsets of evidence that may be suitable for secondary research, for example using systematic review)

When to Use it: When you want an overview of a broad research area to see where the opportunities and gaps lie for further work.

Example:

Osei-Kwasi HA et al. Systematic mapping review of the factors influencing dietary behaviour in ethnic minority groups living in Europe: a DEDIPAC study. *Int J Behav Nutr Phys Act.* 2016 Jul 28;13:85. doi: 10.1186/s12966-016-0412-8.

Resources:

Guidelines for Systematic Reviews in Environmental Management Compiled on behalf of CEE by Centre for Evidence-Based Conservation Bangor University, UK
<http://www.environmentalevidence.org/wp-content/uploads/2014/06/Review-guidelines-version-4.2-final.pdf>

Rapid Evidence Assessment

Definition: Aims to provide an informed conclusion on the volume and characteristics of an evidence base, a synthesis of what that evidence indicates and a critical appraisal of that evidence (i.e. “a stock take”).

When to Use it: To provide a government agency or funding organisation with a rapid picture of the quantity and quality of the available evidence base.

Example: Visram S et al. Consumption of energy drinks by children and young people: a rapid review examining evidence of physical effects and consumer attitudes. *BMJ Open*. 2016 Oct 8;6(10):e010380. doi: 10.1136/bmjopen-2015-010380.

Resources:

Rapid Evidence Assessment Toolkit:

<http://webarchive.nationalarchives.gov.uk/20140305122816/http://www.civilservice.gov.uk/networks/gsr/resources-and-guidance/rapid-evidence-assessment>

Qualitative Systematic Review “Family”

1. Qualitative Systematic Review
2. Qualitative Meta-Synthesis
3. Qualitative Research Synthesis

4. Qualitative Evidence Synthesis

5. Qualitative Interpretive Meta-Synthesis

6. Best Fit **Synthesis**
7. Critical Interpretive **Synthesis**
8. Framework **Synthesis**
9. **Meta**-Aggregation
10. **Meta**-Ethnography
11. **Meta**-Interpretation
12. **Meta**-Narrative
13. **Meta**-Study
14. **Meta**-Summary
15. Narrative **Synthesis**
16. Qualitative **Meta-Synthesis**
17. Realist **Synthesis**
18. Thematic **Synthesis**
19. Rapid Realist **Synthesis**



The Hippy

Qualitative Evidence Synthesis/ Qualitative Systematic Review

Definition: an umbrella term increasingly used to describe a group of review types that attempt to synthesise and analyse findings from primary qualitative research studies.

When to use it: When you want to synthesise research on the attitudes/viewpoints of the public, patients, carers, families, health professionals or barriers/facilitators to an intervention or behaviour change

Example:

Glenton C, et al. Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis. *Cochrane Database Syst Rev.* 2013 Oct 8;(10):CD010414. doi: 10.1002/14651858.CD010414.pub2.

Resources:

Cochrane Qualitative & Implementation Methods Group
<http://methods.cochrane.org/qi/>



Booth et al,
2016.

Guidance on
choosing
qualitative
evidence
synthesis
methods.

**INTEGRATE -
HTA**

Considerations for Review Methodology	Best Fit Framework Synthesis	Concept Analysis	Critical Interpretive Synthesis	Ecological Triangulation	Framework Synthesis	Grounded Formal Theory	Meta-Aggregation	Meta-Ethnography	Meta-Interpretation	Meta-Narrative	Meta-Story	Meta-Summary	Narrative Summary	Narrative Synthesis	Qualitative Interpretive Meta-Synthesis	Rapid Realist Synthesis	Realist Synthesis	Textual narrative synthesis	Thematic synthesis
Review Question																			
Question Type	Multiple-Qual ²	Multiple-Qual	Multiple-Qual ³	Qual	Multiple-Qual	Qual	Qual	Qual	Qual	Multiple-Qual ⁴	Multiple	Multiple	Multiple	Multiple	Qual	Multiple	Multiple ⁵	Multiple	Multiple-Qual
Fixed/ Emerging																			
Dixon-Woods et al (2004; 2005)	FIXED	FIXED	FIXED	FIXED	FIXED	EMERG-ING	FIXED	EMERG-ING	EMERG-ING	FIXED	EMERG-ING	FIXED	Unclear	FIXED	FIXED	FIXED	FIXED	FIXED	FIXED
Epistemology																			
Epistemology Dependence	LOW	MOD	HIGH	HIGH	LOW	HIGH	MOD	HIGH	HIGH	HIGH	MOD	MOD	LOW	LOW	MOD	HIGH	HIGH	LOW	LOW
Idealist/ Realist	Realist?	Unclear	Idealist	Realist/ Idealist	Realist	Idealist	Realist?	Idealist	Idealist?	Idealist	Idealist	Realist?	Unclear	Realist?	Idealist?	Realist	Realist	Realist	Realist
Time/Timeframe																			
Time Required	LOW	MOD	MOD	MOD	LOW	HIGH	MOD	HIGH	HIGH	HIGH	HIGH	MOD	MOD	MOD	MOD	LOW	HIGH	LOW	LOW



Table 7: Conducting a Qualitative Evidence Synthesis – Which Review Processes Are Required?

Component of Review Process	Best Fit Framework Synthesis	Concept Analysis	Ecological Triangulation	Framework Synthesis	Grounded Formal Theory	Meta-Aggregation	Meta-Ethnography	Meta-Interpretation	Meta-Study	Meta-Summary	Narrative Synthesis	Qualitative Interpretive Meta-Synthesis	Textual narrative synthesis	Thematic synthesis
Generating Theory	⊕	⊕	⊗	●	⊕	⊗	⊕	⊕	⊗	⊗	●	●	⊗	⊗
Exploring Theory	●	⊕	⊕	●	⊕	⊗	⊕	⊕	⊗	⊗	⊕	●	⊗	⊕
Testing Theory	⊕	⊕	⊕	⊕	⊕	⊗	⊕	⊕	⊗	⊗	●	●	⊗	⊗
Use of Logic Models	●	⊗	●	●	⊗	●	⊗	⊗	⊗	⊗	●	●	⊗	⊗
Comprehensive Search	⊕	⊗	⊕	⊕	●	⊕	●	⊗	⊕	⊕	⊕	⊗	⊕	⊕
Purposive Search	●	⊕	●	●	⊕	⊗	●	⊕	⊗	⊗	⊗	⊕	⊗	⊗
Rich Conceptual Data	⊗	⊕	⊕	⊗	⊕	⊗	⊕	⊕	⊗	⊗	⊗	●	⊗	⊗
Thick Contextual Data	⊗	⊗	⊕	⊗	●	⊗	●	⊕	⊗	⊗	⊗	●	⊗	⊗
Quality Assessment	⊕	⊗	⊕	⊕	●	⊕	●	⊕	●	●	⊕	⊕	⊕	⊕
Interpretive level of Themes	●	⊕	⊗	●	⊕	⊕	⊕	⊕	⊗	⊗	⊗	●	⊗	●
Model as Output	⊕	●	⊗	●	⊗	⊗	●	⊗	●	●	●	●	⊗	⊗
Graphical Presentation	⊕	●	⊕	●	⊗	⊗	●	⊗	●	●	●	●	⊗	⊗

⊗ = Not Required ● = Uncertain ⊕ = Essential

Booth et al, 2016.
Guidance on
choosing
qualitative
evidence synthesis
methods.
INTEGRATE -HTA

Garside, R. (2008). *A comparison of methods for the systematic review of qualitative research: two examples using meta-ethnography and meta-study* (Doctoral dissertation, Universities of Exeter and Plymouth).

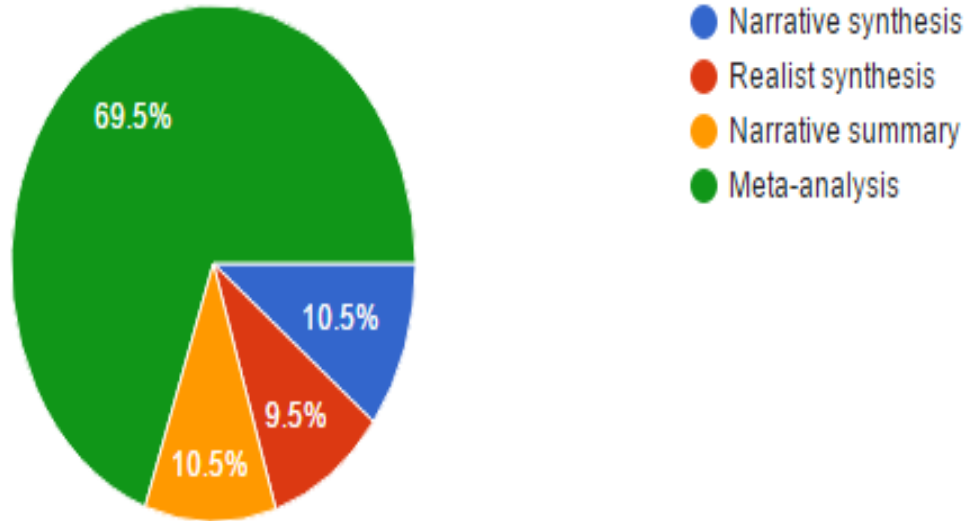
Table 5: The conduct of systematic reviews of qualitative research

Developing research question	Develop an initial, tentative broad research question (Pawson et al., 2004; Paterson et al., 2001; Greenhalgh et al., 2005) Researcher interests (Noblit & Hare, 1988) Assemble multidisciplinary team (Pawson et al., 2004) Commissioner Interest (Pawson et al., 2004) Policy makers' questions (Pawson et al., 2004) Identify evidence gaps or lack of explanation about why something works Agree on preliminary approach, methods, outputs (Greenhalgh et al., 2004) but these may be refined
Scoping exercises	Identifying where relevant research is being done (Pawson et al., 2004) Talking to stakeholders (Pawson et al., 2004) Preliminary searches led by knowledge, experts, browsing etc (Greenhalgh et al., 2005; Pawson et al., 2004; Popay et al., 2006) Identifying main reservoirs of research Identifying team to be involved Refine approach and methods Generate workable definitions of key concepts under study (Paterson et al., 2001)
Identifying relevant literature	Refining research questions and focus Deciding what, if any theoretical framework will be used (Paterson et al., 2001) Type of questions to be answered and appropriate types of research to inform it (Popay et al., 2006) Pragmatic balance between breadth and focus based on amount of available evidence (Paterson et al., 2001) Consider splitting into several more focused review questions if appropriate (Sandelowski et al., 1997) Developing preliminary inclusion/exclusion criteria Focused searches, contact with experts, seedling citation searches. Purposive sampling for competing approaches (Pawson et al., 2004) No over reliance on electronic data bases, but broad subject range searched
Initial assessment study reports	Preliminary reading and re-reading. Structured form to extract relevant information (adapted for each specific project) (Pawson et al., 2004) State whether methods and theories are implicit or explicit (Paterson et al., 2001) Note where described approach is not the apparent approach (Paterson et al., 2001) Assessment of utility / relevance for research question (Pawson et al., 2004)
Analysis and synthesis	Reading and re-reading study reports Constant comparison Extracting findings while maintaining context and relationships in each report (Paterson et al., 2001) Technical elements of reporting recorded Validity within a study reports' own terms and its context (Sandelowski et al., 1997; Greenhalgh et al., 2004)
Preliminary	Categorising the findings (Paterson et al., 2001) Tools for analysis and preliminary synthesis: tabulation, mind maps etc. (Popay et al., 2006) Exploring relationships in the data within and between studies
Full	Synthesis through thematic analysis of findings, (Paterson et al., 2001) translation of concepts and metaphors. (Noblit & Hare, 1988) How methods and theories inform the findings, and their development over time. (Paterson et al., 2001; Greenhalgh et al., 2005) Which theoretical stances are incompatible (Paterson et al., 2001) Quality through contribution to synthesis – record this. (Noblit & Hare, 1988) Explicit focus on identifying competing explanations (Paterson et al., 2001; Greenhalgh et al., 2004) Theory development (Sandelowski et al., 1997; Jensen & Allen, 1996; Paterson et al., 2001)
Dissemination	Dissemination to appropriate to audiences, in collaboration with them (Pawson et al., 2004) Initial draft report as consultation document (Pawson et al., 2004) Critical assessment of the strengths and limitations of the review (Paterson et al., 2001; Popay et al., 2006)
Throughout	Multidisciplinary team, value of multiple viewpoints Reflexivity. Audit trail, recording reasons for decisions made, concepts collapsed etc. Link with commissioners, expert advisory group. More than one person making all decisions about quality, inclusion/exclusion, concepts, metaphors used etc. Review purpose drives the review processes

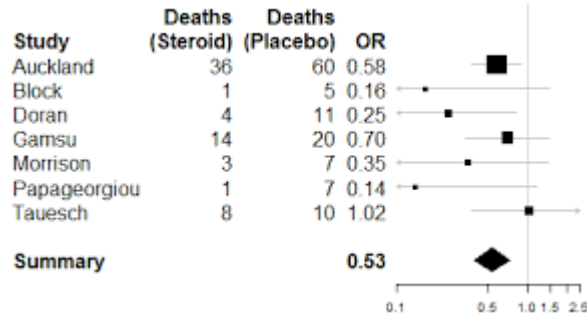


3. Which of the following methods cannot be used to bring quantitative and qualitative studies together within the same review?

(105 responses)



3. Which of the following methods cannot be used to bring quantitative and qualitative studies together within the same review?



Meta-analysis: A **quantitative statistical analysis** of several separate but similar experiments or studies in order to **test the pooled data for statistical significance**

Narrative Synthesis: “Of the 23 studies 11 were quantitative and 10 were qualitative with the remaining 2 being mixed methods, Fifteen studies came from the US with two from France and one each from Germany, Spain, Poland, Portugal, Sweden and the UK”

Realist Synthesis: “If primary care doctors acknowledge the reality of a patient’s symptoms then the patient will view the consultation more positively and will report earlier relief of symptoms ($p < 0.05$)”.

Narrative Summary (involves selection, chronicling, and ordering of evidence to produce an account of the evidence): In 2003 Smith and colleagues conducted focus groups with patients with Multiple Sclerosis. The following year Blanc et al surveyed carers of patients with MS and two years later the same team conducted the first randomised trial of X.

Mixed Methods Reviews “Family”

Mixed Methods Review/
Mixed Methods Synthesis

EPPI-Centre Outcomes
Plus Views Reviews

Narrative Summary

Narrative Synthesis

Realist Synthesis



The Centaur

Realist Synthesis

Definition: a method for studying complex interventions in response to the perceived limitations of conventional systematic review methodology.

Involves identification of **Contexts, Mechanisms and Outcomes** for individual programmes to explain differences, intended or unintended, between them.

When to Use It: To answer the question “what works for whom under what circumstances?”

Example: Greenhalgh, T., Kristjansson, E., & Robinson, V. (2007). Realist review to understand the efficacy of school feeding programmes. *BMJ: British Medical Journal*, 335(7625), 858.

Resources: Wong et al. RAMESES publication standards: realist syntheses *BMC Medicine* 2013, 11:21
<http://www.biomedcentral.com/1741-7015/11/21>

RAMESES Training Materials
http://www.ramesesproject.org/media/Realist_reviews_training_materials.pdf

Realist Search (Wiki)
<http://realistsearch.pbworks.com/>



What is known about the barriers to, and facilitators of, providing optimal care and management for children and young people with T1D within educational settings?

SCREENING EXERCISE

1. Systematic and exhaustive searches to identify all relevant research
2. Retrieval, screening and classification of full reports

Agreement on key questions, review scope and focus amongst co-applicants
Focus for in-depth review prioritized by study type

Stream 1:
'Intervention studies'

Stream 2:
'Non intervention studies'

IN-DEPTH REVIEW

Conducted within study type

Stream 1:
'Intervention studies'

1. Application of inclusion criteria
2. Data extracted from studies to describe characteristics and assess methodological quality
3. Data extracted on study findings
4. Findings synthesized to answer sub-question:

Which interventions are effective for optimising the care and management of children and young people with T1D in educational settings?

Stream 2:
'Non intervention studies'

1. Application of inclusion criteria
2. Data extracted from studies to describe characteristics and assess methodological quality
3. Data extracted on study findings
4. Findings synthesized to answer sub-questions:

What are the attitudes and experiences of children and young people with T1D and those involved with their care and management in educational settings?

What are the barriers and facilitators to achieving optimal T1D management in educational settings?

Stream 3:
IN-DEPTH REVIEW
Conducted across study type

Synthesis across study types to answer sub question:

'To what extent do interventions address the barriers identified build upon the facilitators for providing optimal care and management of children and young people with T1D in educational settings?'

EPPI-Centre
Outcomes
Plus Views
Reviews

Purpose Specific Review Family

Concept Analysis – Seeks to develop a consensual understanding of a concept

Correlates Review – Examines relationship between different variables

Health Technology Assessment (HTA) examines clinical and cost effectiveness of a technology, intervention or procedure

Logistics Review – Reviews evidence on practical feasibility of a change in service delivery

Policy Brief - Concise summary of a particular issue, the policy options to deal with it, and some recommendations on the best option.



The Workman



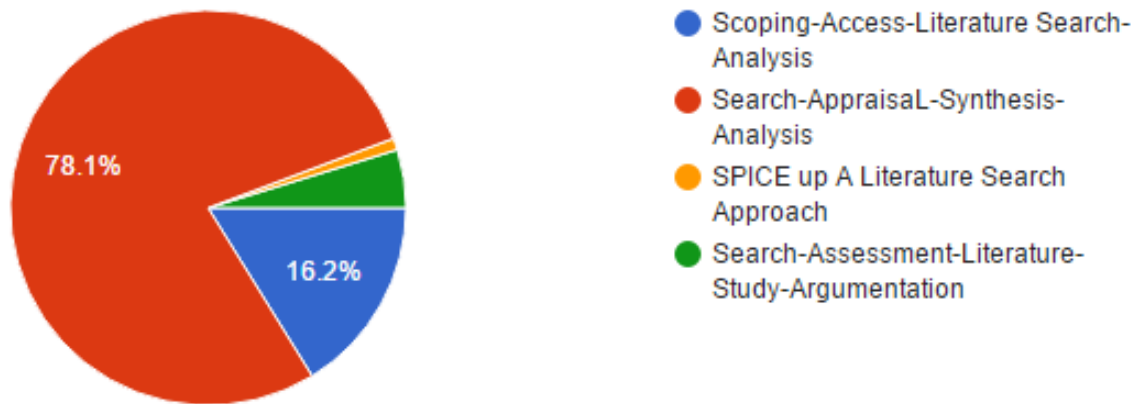
How do you decide which Review type to use?

Research Question	Epistemology	Time	Resources	Expertise	Audience & Purpose	Type of Data
What is the question the review is trying to answer?	What type of knowledge is the review trying to access?	How long has the Team got to complete the review?	How much money is available for the review?	What skills are required?	Who are the audience and how will they use the review?	What types of data will be included?
To Describe; To Analyse; To Explore; To Prove etc	Research Knowledge; User Knowledge; Practitioner Knowledge	Less than 3 months 3-6 months 6-9 months 9-12 months 12+ months	None 000s 0,000s 00,000s	Searching; Appraising; Quant Synthesis; Qual Synthesis etc	Policy Makers; Practitioners; Funders; For Research; For Practice	Numbers; Text; Graphics; Quant Rx Qual Rx Mixed Methods Rx

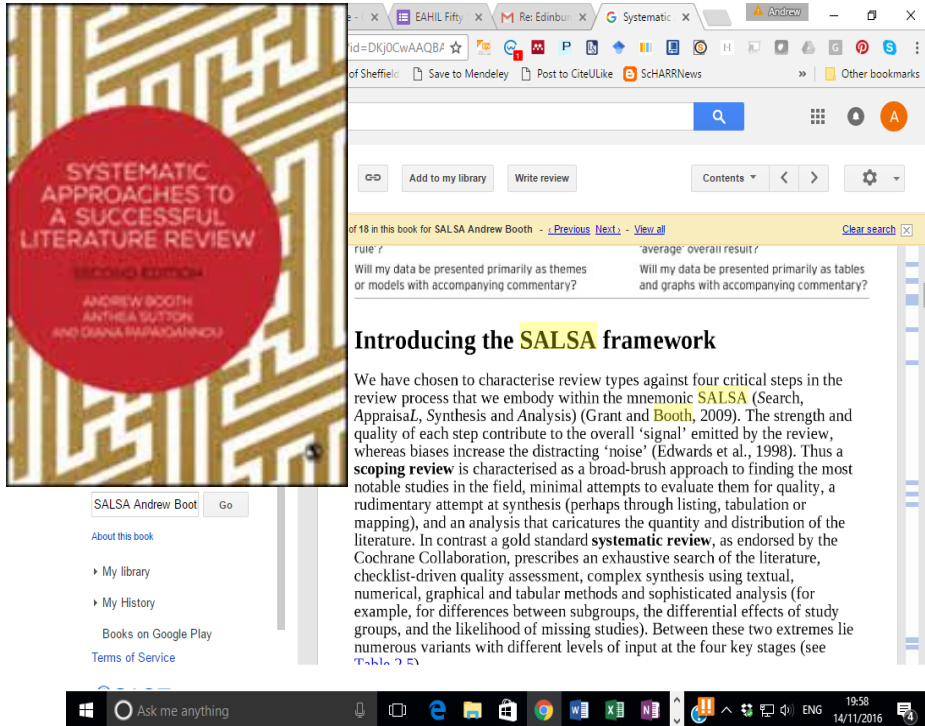


4. The acronym “SALSA” has been used to describe the stages common to any systematic approach to the literature. What do the letters in SALSA stand for?

(105 responses)



4. The acronym “SALSA” has been used to describe the stages common to any systematic approach to the literature. What do the letters in SALSA stand for?



Search – Questioning and Finding

Appraisal – Assessing for Quality

Synthesis – Looking for Patterns

Analysis – Making Sense of the Patterns



Review Article

A typology of reviews: an analysis of 14 review types and associated methodologies

Maria J. Grant* & Andrew Booth†, *Salford Centre for Nursing, Midwifery and Collaborative Research (SCNMCR), University of Salford, Salford, UK, †School of Health and Related Research (SchARR), University of Sheffield, Sheffield, UK

A typology of reviews: an analysis of 14 review

... - Wiley Online Library
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by MJ Grant - 2009 - **Cited by**

614 - Related articles

Analysis (**SALSA**)—was used to
examine the main review types.

Results: Fourteen review ... A
typology of reviews, Maria J. Grant
& Andrew Booth. © 2009 The ...

Abstract

Background and objectives: The expansion of evidence-based practice across sectors has led to an increasing variety of review types. However, the diversity of terminology used means that the full potential of these review types may be lost amongst a confusion of indistinct and misapplied terms. The objective of this study is to provide descriptive insight into the most common types of reviews, with illustrative examples from health and health information domains.

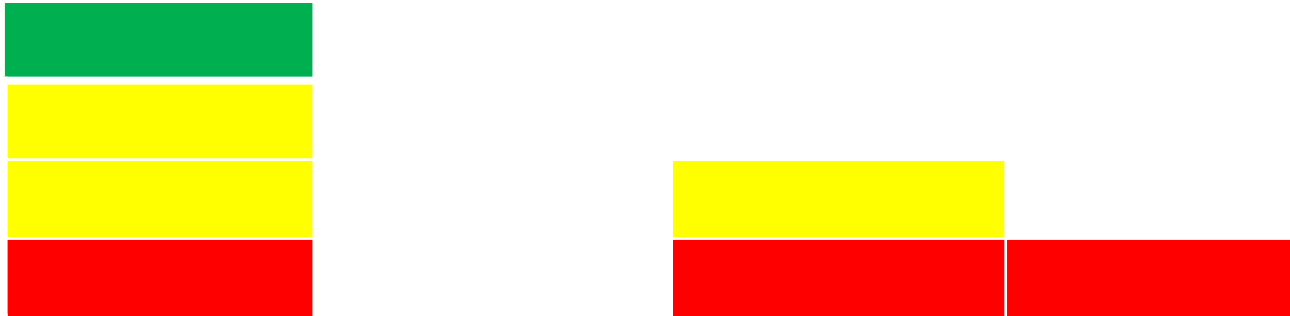
Methods: Following scoping searches, an examination was made of the vocabulary associated with the literature of review and synthesis (literary warrant). A simple analytical framework—Search, Appraisal, Synthesis and Analysis (**SALSA**)—was used to examine the main review types.

Results: Fourteen review types and associated methodologies were analysed against the SALSA framework, illustrating the inputs and processes of each review type. A description of the key characteristics is given, together with perceived strengths and weaknesses. A limited number of review types are currently utilized within the health information domain.

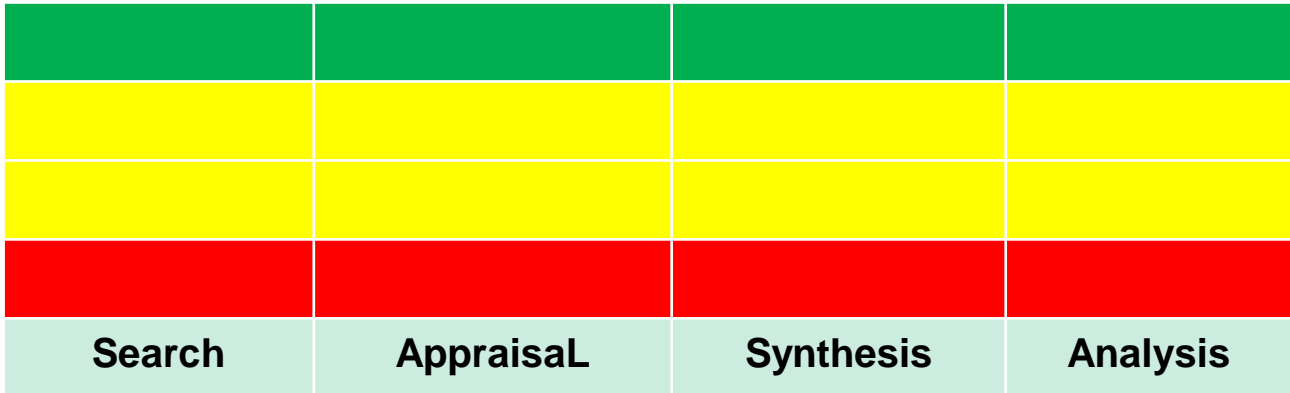
Conclusions: Few review types possess prescribed and explicit methodologies and many fall short of being mutually exclusive. Notwithstanding such limitations, this typology provides a valuable reference point for those commissioning, conducting, supporting or interpreting reviews, both within health information and the wider health care domain.

Comparing Two SALSA Profiles

Mapping
Review



Systematic
Review



Some Resources on Review Types

Booth, A., et al. (2016). Guidance on choosing qualitative evidence synthesis methods for use in health technology assessments of complex interventions. <http://www.integrate-hta.eu/wp-content/uploads/2016/02/Guidance-on-choosing-qualitative-evidence-synthesis-methods-for-use-in-HTA-of-complex-interventions.pdf>

Booth A. (2016) EVIDENT Guidance for Reviewing the Evidence: a compendium of methodological literature and websites. Working Paper. https://www.researchgate.net/publication/292991575_EVIDENT_Guidance_for_Reviewing_the_Evidence_a_compendium_of_methodological_literature_and_web_sites

Booth A, Sutton A & Papaioannou D (2016) *Systematic Approaches to a Successful Literature Review*, 2nd ed, London: Sage.

Grant, M. J., & Booth, A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Information & Libraries Journal*, 26(2), 91-108.

Gough, D., Oliver, S., & Thomas, J. (Eds.). (2012). *An introduction to systematic reviews*. Sage.

Gough, D., Thomas, J., & Oliver, S. (2012). Clarifying differences between review designs and methods. *Systematic reviews*, 1(1), 1.

Hartling, L., Vandermeer, B., & Fernandes, R. M. (2014). Systematic reviews, overviews of reviews and comparative effectiveness reviews: a discussion of approaches to knowledge synthesis. *Evidence-Based Child Health: A Cochrane Review Journal*, 9(2), 486-494.

Kastner, M., Antony, J., Soobiah, C., Straus, S. E., & Tricco, A. C. (2016). Conceptual recommendations for selecting the most appropriate knowledge synthesis method to answer research questions related to complex evidence. *Journal of clinical epidemiology*, 73, 43-49.

Tricco, A. C., Tetzlaff, J., & Moher, D. (2011). The art and science of knowledge synthesis. *Journal of clinical epidemiology*, 64(1), 11-20.



How Long have You Got?

[All durations are illustrative and may be used as a starting point to individual negotiations related to the needs of a specific review].

	<1 Month	1-3 Months	3-6 Months	6-9 Months	9-12 months	12-15 Months	15-18 Months	18-24 Months
Evidence Summary (page 24)	■							
Evidence Briefing (page 21)	■	■						
Rapid Review (page 32)		■	■					
Mapping Review (page 14)		■	■					
Rapid Realist Review (page 35)		■	■	■				
Rapid Evidence Assessment (page 29)		■	■	■				
Scoping Review (page 16)		■	■	■				
Umbrella Review (page 37)			■	■				
Review of Reviews (page 19)			■	■				
Systematic Review of Qualitative Evidence (page 43)					■	■		
Framework Synthesis (page 51)					■	■		
Narrative Synthesis (page 52)						■		
Systematic Review of Quantitative Evidence (page 39)						■	■	■
Meta-Analysis (page 42)						■	■	■
Systematic Review with Logic Model (page 45)						■	■	■
Realist Synthesis (page 47)							■	■
Qualitative Comparative Analysis (page 53)							■	■

Booth A.
(2016)
EVIDENT
Guidance.



Worked Scenarios in:
Booth A, Sutton A &
Papaioannou D
(2016) Systematic
Approaches to a
Successful Literature
Review, 2nd ed,
London: Sage.

Scenario A: Coding and categorising a cross-sectional sample from the literature

What are you aiming to do?

You and your colleagues wish to gain a better understanding of how qualitative research has been used to enhance the usefulness of **randomised controlled trials**. You are not trying to evaluate how well this has been done, merely to describe the different types of contribution. For example to which stages of the trial process have they contributed? Your readers will want you to demonstrate that you have gathered together a representative sample of how qualitative research has been used. However you do not need to perform a comprehensive and exhaustive search of every instance of the use of qualitative research. Optimally you want to produce a framework that depicts all the possible contributions of qualitative research to trials. The main output from your review requires you to categorise the types of contribution together with a count of how often each type of contribution has been made. This framework may help future researchers plan how they will incorporate qualitative research alongside randomised controlled trials. This is an extensive piece of research with a time-span dependent on the extent of your chosen sample.

What factors will influence your choice?

The review is primarily descriptive. The team is more interested in what has been done and how it has been done, rather than in what the outcomes are. They need to create an interpretive framework but not to sample the literature comprehensively – essentially it is a cross-sectional snapshot of activity. The literature will be coded and classified, allowing for further analysis at a subsequent stage if desired. The team does not require an in-depth synthesis of the contents of each included article. Indeed if the sample of literature is to be adequately representative then the team are unlikely to have time to examine all sampled studies in depth.

Suggested Answer: Scenario A - mapping review

What choice(s) might you make?

Clearly you do not require a sophisticated interpretive method in order to undertake this review. Analysis will likely be superficial, except for problematic examples where the review team might

The Role of the Librarian/Information Specialist

1. Project Leader

2. Project Manager

3. Literature Searcher

4. Reference Manager

5. Document Supplier

6. Critical Appraiser

7. Data Extractor

8. Data Synthesiser

9. Report Writer

10. Disseminator

(Beverley, Bath & Booth,
2003)

The Role of the Librarian/Information Specialist

In Systematic Reviews:

Beverley, C. A., Booth, A., & Bath, P. A. (2003). The role of the information specialist in the systematic review process: a health information case study. *Health Information & Libraries Journal*, 20(2), 65-74.

Dudden, R. F., & Protzko, S. L. (2011). The systematic review team: contributions of the health sciences librarian. *Medical reference services quarterly*, 30(3), 301-315.

Harris MR. The librarian's roles in the systematic review process: a case study. *Journal of the Medical Library Association*. 2005;93(1):81-87.

Shell, L., Hofstetter, S., Carlock, D., & Amani, J. (2007). Survivor's guide for the novice: A simplified model for a collaborative systematic review. *Journal of Hospital Librarianship*, 6(4), 1-12.

Briefings

Wilkinson, A., Papaioannou, D., Keen, C., & Booth, A. (2009). The role of the information specialist in supporting knowledge transfer: a public health information case study. *Health Information & Libraries Journal*, 26(2), 118-125.

In Other Review Types:

Scoping Review:

Morris M, Boruff JT, Gore GC. Scoping reviews: establishing the role of the librarian. *Journal of the Medical Library Association : JMLA*. 2016;104(4):346-354. doi:10.3163/1536-5050.104.4.020.

Mapping Review

Cooper ID. What is a "mapping study?" *Journal of the Medical Library Association : JMLA*. 2016;104(1):76-78. doi:10.3163/1536-5050.104.1.013.

Perryman, C. L. (2016). Mapping studies. *Journal of the Medical Library Association : JMLA*, 104(1), 79–82. doi:10.3163/1536-5050.104.1.014

Reviews generally

Tannery NH, Maggio LA. The role of medical librarians in medical education review articles. *Journal of the Medical Library Association : JMLA*. 2012;100(2):142-144. doi:10.3163/1536-5050.100.2.015.

Any Questions?



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