Exercises

# Chapter 2: Getting started on your literature review

## Exercise 2-1: How systematic is this review?

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| --- |
| Disciplines differ in the extent to which they have adopted systematic approaches to research synthesis. Identify a review article within your own subject area or discipline. (e.g., search for ‘review’, ‘overview’, ‘meta-analysis’ or ‘evidence synthesis’ in the title or abstract. To what extent is your chosen review ‘systematic’? |

Exercise 2.2 suggests that you construct a grid and complete it with your own observations:

## Exercise 2-2: Features that make a review systematic/unsystematic

|  |  |
| --- | --- |
| **Features that make this review appear SYSTEMATIC** | **Features that make this review appear NON-SYSTEMATIC** |
|  |  |

## Exercise 2-3: Identify a systematic review

Identify a systematic review in an area of interest to you and also identify a traditional review in a similar or related topic. Place the two reviews side by side and briefly list the differences between the two reviews.

|  |  |
| --- | --- |
| Traditional review | Systematic Review |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Exercise 2-4: How systematic is that review?

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| --- |
| Look through this fictional abstract describing ‘a structured review of the literature’ in the light of what you have already learnt regarding the search, appraisal, synthesis, analysis (SALSA) framework. Which elements of this Abstract make you think that this used a systematic approach? **Performing X in Y: a structured review of the literature**Abstract{Two brief sentences of Background}. A literature search was conducted across {list of Databases and Internet sources} of studies that evaluated X. Information on the type of activity, sample and setting, endpoints and study design were extracted. Studies were classified based on a modified {Name of Model} model. Four categories of activity were identified: actor, decision-support, involvement and systems. The search strategy and selection criteria yielded 21 articles. Eleven studies used an actor activity; two studies used a decision support activity, seven used an involvement activity, and one used a systems intervention. The overall quality of research was uneven: research design – nine studies were quasi-experimental in nature, endpoint measures were not consistent – three did not perform statistical analysis. Sample characteristics varied dramatically. In conclusion, the number of high-quality studies of X remains limited. **Methodological limitations** include measuring an inappropriate **surrogate measure** when the measurement of an **endpoint** is more valid. Further research is needed to understand how each type of activity improves the quality of performing X in a Y setting. |

## Exercise 2-5: Personal skills audit

Having briefly reviewed the skills needed to conduct a successful literature review, reflect on: Which skills do I already possess? Which do I need to acquire? How will I acquire such skills?

|  |
| --- |
| **Personal Skills Audit** |
| **Skill** | **Already Possessed** | **Training Need** | **Source of Training** |
| Project Management |  |  |  |
| Literature Searching |  |  |  |
| Quality Assessment (Generic) |  |  |  |
| Quality Assessment (Study Specific) |  |  |  |
| Synthesis (Generic) |  |  |  |
| Synthesis (Review Specific) |  |  |  |
| Analysis (Generic) |  |  |  |
| Meta-Analysis |  |  |  |
| Writing for Publication |  |  |  |
|  |  |  |  |

## Exercise 2-6: Producing a draft timetable for your review

Produce a draft timetable for your own review. Include the phases of scoping and planning; searching and obtaining references; data extraction and quality assessment; synthesis and analysis; and writing up and disseminating.

Now identify milestones (i.e., time deadlines) or deliverables (specific outputs from each phase of the review process) and where they lie in your review timetable. Deliverables include, but are not necessarily restricted to, a review protocol or review plan (scoping and planning); a search strategy for a principal database with sample search results (searching and obtaining references); a draft data extraction form with completed quality assessment for an included article (data extraction and quality assessment); tables of included study characteristics (synthesis and analysis); and a draft report or article (writing up and disseminating). If you are undertaking a dissertation or thesis, meet with your supervisor each time you produce any of these deliverables. If you are conducting a commissioned review or working with a review team, use review milestones as critical points for either internal or external team meetings. You may find it helpful to use the format for a SMART plan (Table 2.4).

**Table 2.4**Extract from a SMART plan for a review

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *What* | *By whom* | *By when* | *Cost* | *Status* |
| *Conduct scoping searches* | *Information specialist* | *01/09/2021* | *£xxx (per day)* | *Not started/in progress/completed* |
|  |  |  |  |  |
| Completion of pilot searches |   |   |   |   |
|   |   |   |   |   |
| Completion of full searches |   |   |   |   |
|   |   |   |   |   |
|   |   |   |   |   |
| Quality Assessment |   |   |   |   |
|   |   |   |   |   |
|   |   |   |   |   |
|   |   |   |   |   |
| Draft Report |   |   |   |   |
|   |   |   |   |   |
| Final Report |   |   |   |   |

## Exercise 2-7: Problem-solving scenarios

### Scenario A: Adebola

Adebola is starting a literature review as part of a funded pilot project on the social determinants of ill-health in Sub-Saharan Africa. She is interested in the causes of mortality for mothers and infants and she feels she must definitely look at some of the leading causes of disability among adults. Then there is the increasingly high profile of illness in the ageing population. In her country, there is a particular concern around HIV and AIDS. As she starts to build a list of all possible population–illness combinations she realises that her topic has started to get out of hand.

What are the root causes of this particular problem?

What strategies might you suggest to help Adebola overcome this problem?

### Scenario B: Brenda

Brenda is a member of a small team working on a funded review on a management topic. After spending considerable time devising comprehensive search strategies for the specific review question, using the **PICOS** formulation, she has completed an initial sift of retrieved titles and abstracts. She applies the rigorous inclusion criteria devised by the team. Not a single article would make it through to the full article stage. She is concerned that the team has made their review topic too exclusive and may have only an ‘empty review’ to offer to the research funders.

What are the root causes of this particular problem?

What strategies might you suggest to help Brenda overcome this problem?

### Scenario C: Sanjay

Sanjay is a part-time student conducting a literature review for his academic thesis. He has devised a comprehensive search plan for his literature review and meets with his supervisor to discuss his next steps. His supervisor suggests that, in addition to the topics he has already identified, he needs to access key concepts from the psychological literature. Then a work colleague, who has recently completed a Masters of Business Administration, suggests that the management literature may also have something to contribute. Revisiting his search plan, he now finds that these suggested revisions have tripled the extent of the literature to be screened and sifted.

What are the root causes of this particular problem?

What strategies might you suggest to help Sanjay overcome this problem?

### Scenario D: Eloise

It is month 10 of a 12-month funded project and Eloise is worried. She has completed data extraction and quality assessment for about half of the 80 articles to be included in her literature review. She has no idea what findings will emerge from her review, let alone how she will complete the literature review on time.

What are the root causes of this particular problem?

What strategies might you suggest to help Eloise overcome this problem?

### Scenario E: Sandra

Sandra has just received the monthly budget report for her first-ever 18-month literature review. It is month seven and she has spent well over half the budget allocation for the project. The project is proceeding on schedule but she is concerned that she is going to have to report a likely end of project overspend to her line manager at her next three-monthly review meeting. She is concerned that she has underestimated the project budget for the literature review.

What are the root causes of this particular problem?

What strategies might you suggest to help Sandra overcome this problem?

### Scenario F: Tomasz

Tomasz is at a crucial stage of his systematic review on attitudes to citizenship of first-generation East European migrants. He has identified all the studies for likely inclusion in his review. However, he is not sure which method of synthesis to use to summarise these qualitative research reports. His supervisor has extensive experience of supervising systematic reviews, but all have involved meta-analyses and he has never supervised a qualitative evidence synthesis.

What are the root causes of this particular problem?

What strategies might you suggest to help Tomasz overcome this problem?

### Scenario G: James

James is feeling frustrated. He has been sending multiple e-mails to topic experts on the review team asking for their input. Although they are only located 40 miles (64 km) away, in the nearest adjacent city, they seem uncontactable. James is concerned that, without their cooperation and input, the literature review will fall behind its time schedule and lack credibility with practitioners.

What are the root causes of this particular problem?

What strategies might you suggest to help James overcome this problem?

Such decisions constitute a toolkit of ‘rescue’ techniques for bringing a review back on track if time, quality, money or even methodological aspects of a literature review are deviating from the original plan.