Glossary

**adjacency** (Chapter 5) – a term relating to the searching of electronic databases. When using adjacency in a search, you are specifying that words should be searched together in a phrase (e.g. ‘heart attack’, ‘housing market’) to yield a smaller and more precise set of results.

**aggregative** (Chapters 2, 7, 8) – adjective relating to a type of review that is concerned with assembling and pooling data (either quantitative as with meta-analysis or qualitative as with thematic synthesis). To achieve such aggregation requires that there is basic comparability between phenomena.

**analytic/analytical** (Chapter 6) – the facility to use analysis to discern patterns, trends, or themes to data or the properties of tools that assist in such analysis.

**AND** (Chapter 5) – a Boolean operator (qv), that is syntax entered into a search engine or database, that specifically requires two or more concepts to be present in an item (e.g. an abstract) for it to be retrieved (e.g. eat AND drink).

**applicability** (Chapters 6, 8) – the application of the results from individual studies or from a review of studies of a study population to individual people, cases or settings in a target population.

**attrition** (Chapter 6) – the loss of participants during the conduct of a study.

**attrition bias** (Chapter 6) – a type of selection bias caused by attrition (loss of participants).

**author searching** (Chapter 5) – a term relating to the searching of electronic databases or internet sources for one or more authors known to be working in a review topic area.

**Bayesian meta-analysis** (Chapter 7) – a specific type of meta-analysis whereby statisticians express their belief about the size of an effect by specifying some
prior (up front) probability distribution before seeing the data. Once they have completed the meta-analysis, they update that belief by deriving a posterior (after the fact) probability distribution, taking the data into account. Some commentators suggest that qualitative research may be used to inform the prior belief e.g. parents’ attitudes to vaccination.

bias (Chapters 4, 5, 6) – systematic error in individual studies or in a review that can lead to erroneous conclusions about an intervention, programme, or policy.

bibliographic databases (Chapter 4) – a database of bibliographic records typically containing references to the published journal literature (although its scope may also include newspaper articles, conference proceedings and papers, reports, government and legal publications, patents, books, etc.).

blind (Chapter 6) – When a study design is referred to as blind, this means the treatment a person has received or, in some cases, the outcome of their treatment is not known by individuals involved in the study. This is to avoid them being influenced by this knowledge. The person who is blinded could be either the person being treated, their caregiver or the researcher assessing the effect of the treatment (single blind), two of these people (double blind) or all three of these people (triple blind).

Boolean logic (Chapter 5) – a system of logical operators (most commonly AND, OR and NOT) used for specifying information to be retrieved from a computer (bibliographic) database.

Boolean operator (Chapter 5) – a term (most commonly AND, OR and NOT) used to specify the preferred relationship between two or more concepts to be retrieved from a computer (bibliographic) database. For example (eat AND drink; train OR bus; adult NOT child).

Campbell Collaboration (Chapter 1) – a non-profit organisation that applies a rigorous, systematic process to review the effects of interventions in the social, behavioural and educational arenas, in order to provide evidence-based information in the shape of systematic reviews.

changes clause (Chapter 4) – a term originally applied to the documentation of changes to provisions in government contracts but, in this context, used to refer to documented changes to a review plan or protocol.

checklist(s) (Chapter 4) – systematised list(s) of criteria used to assess the quality of a published research study in order to ensure that a standardised approach can be used in an attempt to minimise bias.

citation searching (Chapter 5) – a term relating to the searching of electronic databases or Internet sources for items that have cited, or been cited by, an article
or study known to be relevant to a review topic. This specialised function is only available on a limited number of databases such as Web of Knowledge, CINAHL, and Google Scholar.

cite-while-you-write (Chapter 3) – the facility to use a reference management package alongside a word processing package so that a reviewer can place markers (numerical document identifiers) as they write their article and then automatically generate a bibliography upon its completion.

Cochrane Collaboration (Chapters 1, 2, 7, 8, 9, 10) – An international organisation of over 10,000 volunteers in more than 90 countries that aims to help people make well-informed decisions about health by preparing, maintaining, and ensuring the accessibility of systematic reviews of the benefits and risks of healthcare interventions.

Cochrane Library (Chapter 7) – a collection of databases in medicine and other healthcare specialties, including full-text systematic reviews provided by the Cochrane Collaboration and annotated bibliographic records supplied by other organisations.

Cochrane Review (Chapters 1, 4, 5, 7, 10) – a systematic summary of evidence of the effects of healthcare interventions intended to help people make practical decisions on focused health issues.

cohort study/ies (Chapter 4) – an observational study, commonly used in medicine and social science, in which a defined group of people (the cohort) is followed over time. The outcomes of people in subsets of this cohort are compared, to examine people who were exposed or not exposed (or exposed at different levels) to a particular intervention or other factor of interest.

concept analysis (Chapters 1, 4) – a type of analysis required to identify and determine the scope of a concept designated by a given term as it is used in the literature of a particular subject field.

concept map(s) (Chapters 4, 7) – a diagram showing the relationships among concepts. Concept maps are useful graphical tools for organising and representing the knowledge covered by a review.

concept mapping (Chapter 4) – the process of using a diagram or related graphical tool to represent the knowledge covered by a review.

conceptual map (Chapter 7) – see concept map

confidence value (Chapter 7) – a range of values considered to represent the likely range of values (i.e. the lowest and highest values) for a given population of effect sizes within a given margin of error (e.g. 95%)
conflict of interest statement (Chapter 9) – a written declaration, typically accompanying a systematic review or a primary research study, that documents where individuals involved with the conduct, reporting, oversight or review of research also have financial or other interests, from which they can benefit, depending on the results of the research/review.

confounding (Chapter 6) – the presence of one or more variables, in addition to the variable of interest, that makes it impossible to separate their unique effects leading to incomplete or incorrect conclusions.

confounding variable (Chapter 7) – an unforeseen, and unaccounted-for variable that poses a threat to the reliability and validity of an experiment’s outcome.

constant comparative method/constant comparison (Chapter 7) – a research methodology that, when applied to reviews, requires the comparison of findings from an additional study with findings from previously reviewed studies in the quest for additional insights.

content analysis (Chapter 7) – the process of organising written, audio, or visual information into categories and themes related to the central questions of a study or review.

conversion ratio (Chapter 10) – a term originally from the domain of business which, in this context, relates to the number of references that need to be examined in order to identify one study for inclusion in a review.

controlled vocabulary (Chapter 5) – a carefully selected set of terms used in a bibliographic database, such that each concept is described using only one term in the set and each term in the set describes only one concept.

critical appraisal (Chapters 3, 6, 7, 8) – the use of explicit, transparent methods to assess the data in published research, by systematically considering such factors as validity, adherence to reporting standards, methods, conclusions and generalisability.

critical interpretive synthesis (Chapters 1, 7, 9) – an approach to the synthesis of qualitative and quantitative data used in situations where theorisation of the evidence is required. Critical interpretive synthesis encourages a critique of literatures and the questioning of taken-for-granted assumptions about concepts and methods.

critical path (Chapter 3) – the path through a series of activities relating to a review, taking into account interdependencies, in which late completion of activities will impact on the review end date or delay a key milestone.

cross-sectional survey(s) (Chapter 6) – a specific research design that involves observation of some subset of a population at the same point in time, looking simply at occurrence without being able to establish causation.
database bias (Chapter 8) – a specific form of location bias (q.v.) that relates to the likelihood of a particular journal being indexed in a database and therefore to the likelihood of its constituent articles being identified through systematic literature searches. This may relate to language of publication or to location of publisher or other characteristics related to the database or the publishing industry.

data dredging (Chapter 8) – is the inappropriate (sometimes deliberate) use of processes such as data mining to uncover misleading relationships in data. These relationships may be valid within the test set but are not statistically significant within the wider population.

data extraction (Chapters 4, 6) – the process of retrieving and coding relevant variables from primary studies in order to facilitate comparison and the observation of patterns, themes, or trends.

data mining (Chapter 4) – data processing using sophisticated search capabilities and statistical algorithms in large pre-existing databases as a way to facilitate the discovery of patterns, themes or trends.

data synthesis (Chapters 4, 7) – the process of summarising the contents of original studies using textual, graphical, or tabular means.

descriptive (Chapters 3, 6) – summarising data according to its patterns or characteristics as opposed to analytical which examines relationships between data.

descriptive data synthesis (Chapter 7) – summarising studies descriptively (i.e. what the literature looks like) rather than analytically (what the literature tells us).

descriptive mapping (Chapter 4) – describing the scope of a topic according to the characteristics of its constituent literature.

disconfirming case (Chapter 2) – a case or example that does not fit emergent patterns and allows the researcher to identify and evaluate alternative explanations.

duplicate citations (Chapter 3) – the result of literature searching across multiple databases whenever there is significant overlap in journal coverage.

electronic database(s) (Chapter 5) – databases, most typically bibliographic databases, that can be used to speed up the process of study identification.

empty reviews (Chapter 9) systematic reviews around clearly focused questions that have been unable to identify any studies that fulfil the requirements for both relevance and rigour and therefore contain no included studies.
evidence base (Chapters 6, 7) – information gathered by a reviewer that characterises what is known about a topic, typically from higher quality studies.

evidence-based health policy (Chapter 1) – the application of principles from evidence-based practice to the making of decisions at a population level regarding effective programmes and policies.

evidence-based practice (Chapter 1) – the integration of individual professional expertise with the best available external evidence from systematic research.

evidence synthesis (Chapter 7) – the process of summarising the contents of original research, typically of higher quality studies.

exclusion criteria (Chapter 6) – the standards or criteria used to specify the circumstances in which a person is disqualified from being included in a trial and, by extension, the standards used to determine whether an individual paper is disqualified from inclusion in a systematic review.

exhaustivity (Chapter 2) – the extent to which all possible sources are covered in the quest to identify relevant studies for a review.

explanatory variables (Chapter 7) – variables that may be used to explain the cause of a particular result or finding.

external validity (Chapters 6, 8) – the extent to which the effect of an intervention, programme, or policy being investigated in a study or review might be expected to occur in other participants or settings.

fixed effects analysis (Chapter 7) – an analysis using a statistical model that treats all measurements as if those quantities were non-random. A fixed effects analysis is therefore more likely to underestimate the effect of variation and, correspondingly, to overestimate the effect of an intervention, programme or policy.

Forest plot (or blobbogram) (Chapters 7, 9, 10) – a graphical display designed to illustrate the relative strength of effects in multiple studies addressing, and quantifying the effects for, the same question.

formative (Chapters 7, 8) – an adjective describing those aspects of a review that appear throughout its conduct and may thus inform its ultimate form and content.

framework analysis (Chapter 7) – the process of analysing primary data using an existing framework or model as an organising structure to facilitate the analysis.
framework synthesis (Chapter 7) – a process of synthesis that is analogous to the use of framework analysis but in this case used to analyse data from multiple studies within a review.

free-text (Chapter 5) – a retrieval term referring to when a search engine examines all of the words in every stored document in an attempt to match search words supplied by the user, not just terms pre-specified as entry terms by an indexer.

funnel plot (Chapters 3, 8) – a graphical device for exploring the likelihood of publication bias by plotting a measure of study size against a measure of effect size and thereby seeking to identify any likelihood of missing populations of studies.

Gantt chart (Chapter 4) – a project management tool that seeks to convey project tasks, timescales, deliverables, and dependencies.

generalisability (Chapters 6, 8) – the extent to which findings from research conducted in one time and place can be applied to populations in another time and/or place.

gold standard (Chapters 2, 6, 9) – a metaphorical term used to describe the extent to which a particular study or characteristic may be used as a basis for comparison with other studies or characteristics.

grey literature (Chapters 5, 9) – information produced by government, academics, business and industry in electronic and print formats not controlled by commercial publishing, (i.e. where publishing is not the primary activity of the producing body).

grounded theory (Chapters 1, 7) – procedures developed within primary data analysis, and subsequently applied to secondary research, that seek to provide a method for generating theory grounded in the data in the absence of an a priori theory or hypothesis.

hand searching (Chapters 5, 9) – a complementary method of searching that requires systematic scanning of the contents of key journals in order to offset perceived deficiencies in database coverage or indexing.

health technology assessment (Chapter 1) – a type of review commonly conducted for health policymakers that seeks to inform decisions about the effectiveness and cost-effectiveness of a particular procedure, programme, policy or intervention, typically within a tightly constrained timeframe.

heterogeneous (Chapter 10) this refers to the extent to which studies included in a systematic review display variability. Such variability may relate to differences
in the included participants, interventions and outcomes or to diversity in study design and the consequent risk of bias. These differences may in turn contribute to variability in the intervention effects being evaluated in the different studies (statistical heterogeneity).

**heterogeneity** (Chapter 6) – the extent to which studies demonstrate variation across a range of key variables.

**hierarchy/ies of evidence** (Chapter 6) – an approach to defining the quality of research studies based on their study design, favouring studies that are comparative, prospective, and protected against systematic error or bias.

**homogeneity** (Chapters 2, 7) – the extent to which studies exhibit shared characteristics across a range of key variables.

**idea web(s)/idea webbing** (Chapters 4, 7) a form of concept mapping regarded as particularly valuable in making sense of a complex phenomenon or programme.

**implementation fidelity** (Chapter 8) – the degree to which an intervention, programme, or policy can be seen to have been put into practice as originally intended.

**incident knowledge** (Chapter 2) – newly appearing knowledge that makes a contribution to an improved understanding of a particular topic area.

**inclusion criteria** (Chapters 4, 6) – the standards or criteria that have to be fulfilled in order for a person to be eligible to be included in a trial and, by extension, the standards used to determine whether an individual study is eligible for inclusion in a systematic review.

**index paper** (Chapter 7) – a paper that is regarded as being rich in content and is therefore considered an appropriate starting point for a subsequent investigation of a series of papers.

**information explosion** (Chapter 1) – a social phenomenon that describes the state at which information is being produced at a rate quicker than it can be identified, organised, managed, or retrieved.

**information literate** (Chapter 1) – the facility of an individual to be able to undertake basic information processing tasks.

**information overload** (Chapter 1) – the point at which an individual has too much information and is therefore unable to process it effectively.

**information retrieval** (Chapters 1, 2) – a set of techniques and procedures used to specify and identify relevant items from a data source such as an electronic database.
informational redundancy (Chapter 7) – a point at which further information fails to add additional value to knowledge or understanding already established from previously identified studies.

integrative review (Chapters 1, 2) – originally a type of review that sought to integrate findings from a number of research papers; nowadays more commonly used to describe a review that integrates both quantitative and qualitative data together in the same review product.

interpretive (Chapters 2, 7) – a type of review that seeks to use the process of synthesis as a means of explaining a particular phenomenon.

internal validity (Chapters 6, 8) – the extent to which the design and conduct of a study are likely to have prevented bias and therefore the results may be considered reliable.

language bias (Chapter 8) – a form of bias relating to the original language of a publication. It is characterised by a tendency for reviews to be more likely to include studies published in the language of that review.

language of publication bias (Chapter 2) – a systematic bias caused by the increased/decreased likelihood of a research paper containing positive or negative results as a function of the language in which it is being published.

law of diminishing returns (Chapter 3) – the phenomenon that, as one extends searching across more and more databases the yield becomes correspondingly less productive.

limit function (Chapter 5) – a facility on bibliographic databases that allows the searcher to restrict search results by date, language, or publication type in order to make retrieval results more manageable.

line of argument (synthesis) (Chapter 7) – a component method of meta-ethnography that seeks to organise findings from multiple studies into a single explanatory line of argument.

location bias (Chapter 8) – an umbrella term referring to any form of bias relating to the location(s) in which a study is originally conducted. Most commonly, but not necessarily, associated with language bias it may result in a review being less likely to include studies that originate from a particular region of the world (e.g. the systematic exclusion of studies from low and middle income countries).

logic model(s) (Chapters 4, 7, 8, 9) – a visual representation showing the sequence of related events connecting the need for a planned programme with the programme’s desired results or short-term and long-term outcomes. A logic model
may be used at the beginning of a review to plan a review strategy or towards the end as a framework for interpreting and presenting the findings.

**longitudinal** (Chapter 6) – study design in which the same subjects are observed repeatedly over a period of time.

**lumping** (Chapter 7) – the action of deciding to undertake a broad review in preference to several related, but individual, reviews on the basis of commonalities shared by the population, interventions and/or outcomes (cf. splitting).

**mapping review** (Chapters 2, 9) – a rapid search of the literature aiming to give a broad overview of the characteristics of a topic area. Mapping of existing research, identification of gaps, and a summary assessment of the quantity and quality of the available evidence help to decide future areas for research or for systematic review.

**meaningfulness** (Chapter 2) – the value that an individual or population ascribes to a particular intervention, programme or policy as established from the personal opinions, experiences, values, thoughts, beliefs or interpretations of the individuals themselves, their families, or significant others.

**memo-ing** (Chapter 7) – the process of documenting observations on a research process conducted by a researcher or reviewer as their work progresses.

**meta-analysis** (Chapters 1, 3, 7, 8, 9, 10) – the process of combining statistically quantitative studies that have measured the same effect using similar methods and a common outcome measure.

**meta-ethnography** (Chapters 1, 2, 3, 7, 8) – the most common method of synthesis of qualitative research, originally used to synthesise ethnographies but now used to refer to synthesis of other study types, typically with the objective of theory generation.

**meta-method** (Chapter 2) – a type of synthesis that seeks to derive insights from studying the characteristics of different methods used to investigate a shared phenomenon.

**meta-narrative** (Chapter 4) – a type of synthesis that seeks to explore large and heterogeneous literatures from different research traditions or disciplines by following the unfolding storyline or narrative from each.

**meta-theory** (Chapter 2) – a type of synthesis that seeks to synthesise multiple theories from research papers examining a shared phenomenon.

**methodological filter(s)** (Chapters 3, 5) – standardised search strategies designed to retrieve studies of a particular methodology type.
mind map(s) (Chapters 4, 7) – a diagram used to represent words, ideas, tasks or other concepts linked to, and arranged around, a central key word or idea.

mixed method(s) review (Chapters 2, 7) – a literature review that seeks to bring together data from quantitative and qualitative studies integrating them in a way that facilitates subsequent analysis.

narrative review (Chapter 2) – the term used to describe a conventional overview of the literature, particularly when contrasted with a systematic review.

narrative synthesis (Chapters 4, 7) – a systematic process of describing the shared properties of a group of studies included in a review primarily through text but augmented by tabular and graphical displays of data.

NOT (Chapter 5) – a Boolean operator (see above), that is syntax entered into a search engine or database, that explicitly requires that one concept is present in an item (e.g. an abstract) and the other is absent for it to be retrieved (e.g. Female NOT Male).

observational study/studies (Chapter 7) – a study that investigates the effects of an intervention or programme where the assignment of subjects is outside the control of the investigator.

open source software (Chapter 4) – a method for the distribution of software without charge which allows the source code to be modified or developed in the public domain subject to fulfilment of prespecified terms and conditions.

OR (Chapter 5) – a Boolean operator (see above), that is syntax entered into a search engine or database, that allows for the presence in a single item (e.g. an abstract) of either one concept or an alternative concept or both in order for it to be retrieved (e.g. fruit OR vegetables).

pearl growing (Chapter 5) – the process of identifying a known highly relevant article (the pearl) as a means to isolate terms on which a search can subsequently be based.

PICOC (Chapter 4) – an acronym, coined by Petticrew and Roberts, 2006, to capture a precise review question by specifying the five elements of population-intervention-comparison-outcome-context.

PICOS – an acronym describing an approach to formulating or specifying a review question according to the elements of Population Intervention Comparison Outcome and Study design.

point estimate (Chapter 7) – a single point or value considered to represent the most likely approximation for a given population of effect sizes (e.g. a mean value).
practically significant (Chapter 6) – a difference observed in a study or review that is considered by professionals to be important enough to be worth achieving.

prevalent knowledge (Chapter 2) – that knowledge that exists on a topic at a particular point in time.

primary study/ies (Chapter 5) – original research studies; compare secondary studies which are reviews or syntheses.

prior distribution (Chapter 7) – the specification, in advance of a test or experiment, of the distribution of an uncertain quantity.

PRISMA (preferred reporting items for systematic reviews and meta-analyses) (Chapters 5, 9) – a standard for the reporting of systematic reviews and meta-analyses in the published journal literature (formerly QUOROM).

probability distribution (Chapter 7) – a statistical function that identifies either the probability of each value of a random variable (when the variable is discrete), or the probability of the value falling within a particular interval (when the variable is continuous).

programme theory (Chapters 1, 7, 8) – an idealised model that shows how programme features interact to influence performance indicators, and produce desired outcomes. It comprises three components; (i) a problem definition; (ii) programme components linked together to create a programme logic, and (iii) a link between the programme logic and programme activities through the use of performance indicators.

prospective (Chapter 6) – a prospective study asks a specific study question (usually about how a particular exposure affects an outcome), recruits appropriate participants and looks at the exposures and outcomes of interest in these people over the following months or years.

proximity (Chapter 5) – the specification of two search terms to be close to each other e.g. in a phrase or within the same sentence in order for a document to be retrieved from a database.

publication bias (Chapters 2, 3, 5, 7, 8) – the tendency for researchers, editors, and pharmaceutical companies to handle the reporting of experimental results that are positive (i.e. they show a significant finding) differently from results that are negative (i.e. supporting the null hypothesis) or inconclusive. Typically this is evidenced in an increased likelihood of publication.

qualitative (Chapter 4) – adjective relating to the facility by which a phenomenon may be effectively expressed in terms of its (non-numerical) characteristics.
qualitative evidence synthesis (Chapter 7) – an umbrella term increasingly used to describe a group of review types that attempt to synthesise and analyse findings from primary qualitative research studies.

qualitative study/ies (Chapters 4, 6) – an approach to research that is concerned with eliciting the subjective experiences of participants. Qualitative research may entail a choice of methodologies such as ethnography, grounded theory, phenomenology and may use a variety of methods of which questionnaire, interview and participant observation are the most common.

quality assessment (Chapters 2, 4, 6) – the systematic process of examining the internal and external validity of studies for potential inclusion in a review so as to evaluate their individual contributions to the overall ‘bottom line’ of that review.

quality of conduct (Chapter 2) – that attribute of a review that relates to how well its processes and procedures have been carried out.

quality of reporting (Chapter 2) – that attribute of a review that relates to how well its processes and procedures have been documented.

quantitative (Chapter 4) – adjective relating to the facility by which a phenomenon may be effectively expressed in numerical values.

random effects analysis (Chapter 7) – an analysis using a statistical model that allows for random variation among populations. A random effects analysis therefore provides a more conservative estimate of an effect size and is less likely to overestimate the effect of an intervention.

randomised controlled trial(s) (RCT) (Chapters 1, 4, 6, 7) – a study design considered to be the most rigorous method of determining whether a cause-effect relationship exists between an intervention and an outcome. As such systematic reviews of randomised controlled trials provide the best available evidence of effectiveness. The strength of the RCT lies in the process of randomisation that should allow both intervention and comparison to be compared on an equal basis when considering the effect of an intervention.

rapid evidence assessment (Chapters 3, 7, 8) – a tool for obtaining a rapid overview of the available research evidence on a policy issue, as comprehensively as possible, within the constraints of a given timetable. It uses elements of scoping review and mapping review methodologies.

realist synthesis (Chapters 1, 2, 7, 8) – a method for studying complex interventions in response to the perceived limitations of conventional systematic review methodology. It involves identification of contexts, mechanisms and outcomes for individual programmes in order to explain differences, intended or unintended, between them.
**reciprocal translation** (Chapter 7) – a component technique of meta-ethnography which involves exploring the extent to which an idea or concept used by one author accurately represents use of a related idea or concepts by other authors.

**reference management** (Chapters 3, 5) – the management of bibliographic references, and sometimes full-text papers, typically through electronic means so that they may be identified, stored, retrieved, and used effectively.

**reflexivity** (Chapter 9) – the capacity of a researcher to consider the effect that their relationship to the subject or participants of a study may have on the conduct and interpretation of that study.

**refutational synthesis** (Chapter 8) – a stage of meta-ethnography (q.v.) where the reviewer is involved in a purposive search for phrases, metaphors and themes that refute any emerging patterns that have emerged from included data.

**reliability** (Chapter 6) – the extent to which a particular result measured at a particular point in time accurately captures the likely result of a similar measurement made at another point in time.

**replicability** (Chapters 3, 9) – the extent to which a result or measurement achieved by one researcher or reviewer could be achieved by another researcher or reviewer working independently.

**replicative** (Chapter 7) – the property of causing replication.

**reproducibility** (Chapter 9) – the property of any scientific study by which results obtained from one experiment can be reproduced, either by the same or another investigator, by repeating the method as described. In the context of systematic reviews it refers to the extent to which review methods, if followed as described, would, at least in theory, produce the same results.

**research question** (Chapter 4) – a precisely stated question that specifically conveys what the researcher will attempt to answer.

**research synthesis** (Chapter 1) – a form of synthesis that seeks to synthesise only data obtained through the medium of research.

**respondent validation** – (also known as member checking) (Chapters 8, 9) a technique used by researchers to help improve the accuracy, credibility, validity and transferability of a study, Typically the interpretation and report (or a portion of it) is given to members of the sample (respondents/informants) in order to check the authenticity of the work. Feedback from the members of the sample serves as a check on whether the interpretation is viable.
risk of bias tool (Chapter 8) – an instrument developed by the Cochrane Collaboration to assist in the identification and presentation of data on the likelihood of particular types of bias both in an individual study and in a group of studies.

scope creep (Chapters 3, 4, 8) – the tendency for any review to expand the work required without due consideration of the costs and the implications for timely production.

scoping (Chapter 4) – the process of identifying the characteristics of a topic and its associate literature in order to determine a feasible strategy for a subsequent review.

scoping review (Chapters 2, 5, 9) – a type of review that has as its primary objective the identification of the size and quality of research in a topic area in order to inform subsequent review.

scoping search (Chapter 5) – a type of literature search that seeks to determine rapidly and efficiently the scale of a predefined topic to inform the subsequent conduct of a review.

search filters (Chapter 5) – a generic term for any collection of search terms designed to optimise retrieval from a bibliographical database. Such terms may be topical (i.e. related to the subject content of items to be retrieved) or methodological (pertaining to the methodology of retrieved items).

search strategy (Chapters 5, 8) – the plan for retrieval of information on a chosen topic and, more specifically, the combination of search terms used to retrieve relevant items.

selection bias (Chapters 2, 6) – a systematic error in choosing subjects for a particular study that results in an uneven comparison whether such subjects represent people (for a primary research study) or papers (for a literature review).

selective reporting bias (Chapter 8) – the selection, on the basis of the results, of a subset of analyses to be reported.

sensitivity (Chapter 5) – a diagnostic term, appropriated by information retrieval, to refer to the capacity of a search strategy to identify all relevant items (i.e. not missing any relevant items) on a particular topic.

sensitivity analysis (Chapters 2, 3, 8, 9) – in this context, an analysis used to determine how sensitive the results of a systematic review are to changes in how it was done. Sensitivity analyses assess how robust the results are to assumptions made about the data and the methods that were used.
**snowballing** (Chapter 5) – literature-searching technique that involves locating a relevant source paper and then using this paper as a starting point for either working back from its references or for conducting additional citation searches.

**snowball sampling** (Chapter 1) – an epidemiological term used to describe the sampling procedure whereby sampling of a small group of subjects (or papers) helps to define an appropriate strategy and sample for further sampling.

**social validity** (Chapter 7) – In this context, the selection of interventions, programmes or policies on the basis that they are socially acceptable.

**specificity** (Chapter 5) – a diagnostic term, appropriated by information retrieval, to refer to the capacity of a search strategy to identify only relevant items (i.e. not retrieving any irrelevant items) on a particular topic.

**SPICE** – an acronym describing an approach to formulating or specifying a review question according to the elements of Setting Perspective phenomenon of Interest Comparison and Evaluation.

**splitting** (Chapter 7) – the action of deciding to undertake a number of narrowly-focused reviews on adjacent topics in preference to a single broad review on the basis of meaningful differences between elements of the population, interventions; and/or outcomes (cf. lumping).

**statistically significant** (Chapters 6, 8) – a measurable statistical result that is unlikely to have been achieved by chance.

**study selection** (Chapter 4) – the process of applying inclusion and exclusion criteria to an initial set of documents in order to arrive at a manageable set of includable studies.

**subgroup analysis** (Chapters 2, 6, 9) – a set of procedures that follows up analysis of an entire study population (people or papers) by looking for patterns in one or more subsets of that population.

**subject index(es)** (Chapter 5) – listings, either printed or electronic, that seek to provide retrieval of items in a predefined topic area or discipline.

**summative** (Chapter 7) – an adjective describing those aspects of a review that can only be assessed or evaluated as it approaches its completion.

**synonyms** (Chapter 5) – in literature searching, different words likely to be used by authors or other researchers with a similar meaning to a word that you have selected to describe your own topic e.g. car, motor vehicle and automobile.
**synthesis strategy** (Chapter 7) – an approach to planning the subsequent synthesis and analysis of a review by attempting to pre-specify review procedures. Typically a synthesis strategy is based on a preliminary assessment of the likely nature of the data and a knowledge of the purpose for which the review is to be used.

**systematic review** (Chapters 1, 4, 5, 9) – 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.

**test for heterogeneity** (Chapter 7) – a formal statistical test used, prior to meta-analysis, to examine quantitatively the extent of variability or differences between studies in the estimates of effects.

**textwords** (Chapter 5) – exact words found in the title and/or abstract of an article that can be used to retrieve its details from a bibliographic database. Often called keywords.

**thematic analysis** (Chapter 7) – a method often used to analyse data and to identify themes in primary qualitative research.

**thematic synthesis** (Chapters 2, 3, 4, 7) – the use of methods, analogous to thematic analysis in primary qualitative research, in systematic reviews to bring together and integrate the findings of multiple qualitative studies.

**theoretical saturation** (Chapters 2, 4, 7) – the point within an interpretive review at which all data can be coded into an existing category; new categories are not emerging, and the existing category structure appears stable or secure.

**thesaurus** (Chapter 5) – a list of words showing similarities, differences, dependencies, and other relationships to each other and mapping words used by database users to the actual words utilised by the constructors of that database.

**transferability** (Chapter 3) – the ability to apply results of research in the context of one or more study populations to the context of a target population. Also, the extent to which a review invites its readers to make meaningful connections between elements of the review and their own experiences.

**transparency** (Chapter 3) – the use of a set of policies, practices and procedures to help to make the contents and process of a review accessible, usable, informative and audible to its readers.

**triangulation** (Chapter 8) – a term from primary qualitative research that refers to the use of two or more methods or sources to collect data on a particular phenomenon. Findings established from multiple sources are more likely to be valid
and discrepancies or inconsistencies across sources will merit further investigation. In the specific context of literature reviews triangulation may refer to use of findings from different study types or methods, from quantitative and qualitative research, or from different disciplines or schools of thought.

**truncation** (Chapter 5) – a truncation symbol is a character (determined by the database, such as an asterisk or dollar sign) which can be substituted, when searching databases or search engines, for various endings of the stem of a word (e.g. organi* for organisation, organization, organised, organized).

**truth table** (Chapter 8) – a matrix using binary notation to show all possible truth-values for a particular factor, derived from the truth-values of its component studies. It is particularly useful for examining the possible relationships between factors or variables.

**validity** (Chapters 6, 8) – the degree to which a result (of a study or a review) is likely to be true and free of bias (systematic errors).

**vote-counting** (Chapter 2) – a (typically derogatory) term for the process by which the likelihood of a review finding being correct is determined simply by the numbers of studies reporting a favourable or unfavourable result.

**wildcard** (Chapter 5) – a wildcard character is a character (typically a question mark) that may be substituted, when searching databases or search engines, for any of a defined subset of all possible characters (e.g. wom?n for woman or women).