This note defines review and literature review, presents some types and approaches, explains some issues on literature review and provide references. It proposed ideas from several authors.

North Carolina State University Libraries (2019) suggest that literature review could be presented on two axis: 1) part of a larger work or stand alone work and 2) selective vs comprehensive (see Figure A). Based on North Carolina State University Libraries (2019) and Galvan and Galvan (2017), a literature review could be seen in multiple products:
... as a section in an article in a peer-reviewed journal
... as a chapter for a thesis / dissertation
... as assignment or term paper for a course
... as a research review article

Figure A - Literature reviews as different products

<table>
<thead>
<tr>
<th>Article in a journal</th>
<th>Part of a larger work</th>
<th>Thesis / dissertation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course assignment / term paper</td>
<td>Stand alone work</td>
<td></td>
</tr>
<tr>
<td>Comprehensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review article</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adapted from North Carolina State University Libraries (2019)

Webster and Watson (2002) proposed two types based on the maturity of topic (see Table 1) and Grant and Booth (2009) proposed classification of the main review types (see Table 2).

Table 1 - Types of reviews

<table>
<thead>
<tr>
<th>Mature topic</th>
<th>Emerging issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>“where an accumulated body of research exists that needs analysis and synthesis”</td>
<td>“would benefit from exposure to potential theoretical foundations”</td>
</tr>
<tr>
<td>“conduct a thorough literature review and then propose a conceptual model that synthesizes, and extends existing research”</td>
<td>“be shorter ... the fresh theoretical foundations proposed in developing a conceptual model”</td>
</tr>
</tbody>
</table>

Adapted from Webster and Watson (2002, p.xiv)
<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature review</td>
<td>“Generic term: published materials that provide examination of recent or current literature. Can cover wide range of subjects at various levels of completeness and comprehensiveness. May include research findings.”</td>
</tr>
<tr>
<td>Critical review</td>
<td>“Aims to demonstrate writer has extensively researched literature and critically evaluated its quality. Goes beyond mere description to include degree of analysis and conceptual innovation. Typically results in hypothesis or model.”</td>
</tr>
<tr>
<td>Mapping review / systematic map</td>
<td>“Map out and categorize existing literature from which to commission further reviews and/or primary research by identifying gaps in research literature”</td>
</tr>
<tr>
<td>Meta-analysis</td>
<td>“Technique that statistically combines the results of quantitative studies to provide a more precise effect of the results”</td>
</tr>
<tr>
<td>Mixed studies review / mixed methods review</td>
<td>“Refers to any combination of methods where one significant component of a literature review (usually systematic). Within a review contest it refers to a combination of review approaches for example combining quantitative with qualitative research or outcome with process studies”</td>
</tr>
<tr>
<td>Overview</td>
<td>“Generic term: summary of the (medical) literature that attempts to survey the literature and describe its characteristics”</td>
</tr>
<tr>
<td>Qualitative systematic review / evidence synthesis</td>
<td>“Method for integrating or comparing the findings from qualitative studies. It looks for ‘themes’ or ‘constructs” that lie in or across individual qualitative studies”</td>
</tr>
<tr>
<td>Rapid review</td>
<td>“Assessment of what is already known about a policy or practice issue, by using systematic review methods to search and critically appraise existing research”</td>
</tr>
<tr>
<td>Scoping review</td>
<td>“Preliminary assessment of potential size and scope of available research literature. Aims to identify nature and extent of research evidence (usually including ongoing research)”</td>
</tr>
<tr>
<td>State-of-the-art review</td>
<td>“Tend to address more current matters in contrast to other combined retrospective and current approaches. May offer new perspectives on issue or point out area for further research”</td>
</tr>
<tr>
<td>Systematic review</td>
<td>“Seeks to systematically search for, appraise and synthesis research evidence, often adhering to guidelines on the conduct of a review”</td>
</tr>
<tr>
<td>Systematic search and review</td>
<td>“Combines strengths of critical review with a comprehensive search process. Typically addresses broad questions to produce ‘best evidence synthesis’ ”</td>
</tr>
<tr>
<td>Systematized review</td>
<td>“Attempt to include elements of systematic review process while stopping short of systematic review. Typically conducted as postgraduate student assignment”</td>
</tr>
<tr>
<td>Umbrella review</td>
<td>“Specifically refers to review compiling evidence from multiple reviews into one accessible and usable document. Focuses on broad condition or problem for which there are competing interventions and highlights reviews that address these interventions and their results”</td>
</tr>
</tbody>
</table>

Source: Grant and Booth (2009, p.94-95)
Definition of Literature Review

A literature review is a survey of the relevant literature by researchers on a specific topic or field.

Hart (1998, p.13)
“The selection of available documents (both published and unpublished) on the topic, which contain information ideas, data and evidence written from a particular standpoint to fulfil certain aims or express certain views on the nature of the topic and how it is to be investigated, and the effective evaluation of these documents in relation to the research being proposed.”

Denney and Tewskbury (2013, p.218)
“a literature review is a comprehensive overview of prior research regarding a specific topic ... shows the reader what is known about a topic, and what is not known, thereby setting up the rationale or need for a new investigation”

Snyder (2019, p.333)
“A literature review can broadly be described as a more or less systematic way of collecting and synthetizing previous research.”

According to the American Psychological Association (in Meesala, 2014, p.4 from APA 2010)
“authors of literature review evaluate a body of literature by identifying relations, contradictions, gaps, and inconsistencies in the literature and by suggesting the next step needed to solve the research problem”

Importance of Literature Review

It is important to perform a literature review for may reasons.

Cooper (1989, p.35-36) identifies some reasons such as: “improve your research methodology”, “focus on research problem”, “cater to knowledge base for research area”, “contextualising research findings”, and “ensure novelty in your work”.

Denney and Tewskbury (2013, p.219) suggest other reasons such as: “force a writer to educate him/herself on as much information as possible pertaining to the topic chosen”, “demonstrate to readers that the author has a firm understanding of the topic”, “credibility”, and “integrity”.

Josserand (2019, p.66-71) adds: “you need a knowledge gap”, “finding the gap” and “demonstrating your contribution”.

Often a literature review offer a quick glimpse on the rigor of the overall research.
Position of Literature Review in Research Process

Literature review is included in all stages of the research process, more specifically the idea generation and problem definition stages, but also influence the research design, implementation and reporting stages.

“All empirical studies - qualitative, quantitative, or mixed methods - must be connected to literature or concepts that support the need for the study, be related to the study’s purpose statement, and situate the study in terms of previous work.” (Rocco and Plakhotnik, 2008, p.120)

A) Literature review as the beginning of the research process for idea generation

Literature review could help idea generation by providing preliminary data gathering on a subject. A state of the art or literature review done by someone else may be useful at the initial stage to give a broad overview.

B) Literature review in definition of concepts

Literature review could help in defining the core concepts of a study and its various dimensions and complexity.

C) Literature review in definition of conceptual or theoretical frameworks

Rocco and Plakhotnik (2008) distinguish literature Reviews, conceptual frameworks, and theoretical frameworks. Conceptual frameworks could be seen as the presentation of previous conceptual, theoretical and empirical work relevant to the study. Theoretical frameworks could be seen as the presentation of a specific theory to be tested. It may differ if it is a qualitative or quantitative study (Denney and Tewskbury, 2013; Rocco and Plakhotnik, 2008). In a qualitative study, the focus should be on the research question in a broader context; while in a quantitative study, the focus should be on the theories, the methods, the variables and the operationalization of those variables and the findings from previous studies in testing an hypothesis or theory (Denney and Tewskbury, 2013)

D) Literature review in methodology for research methods choices

Literature review could help development of the methodology section by identifying the methodology choices already used in previous studies and their strengths and limits.

Using grounded theory is a special case when related to literature review. If we take grounded theory to the extreme, a literature review should not be conducted at all to avoid contamination (Christiansen, 2011; Dunne, 2011; Ramalho, Adams, Huggard and Hoare, 2015). This is a sentiment not shared by everyone (Rocco and Plakhotnik, 2008) who see a need for a connection to a body of literature even with grounded theory. Grounded theory is not a unique method and many approaches to grounded theory exist; therefore, the when and how literature review is conducted and how much literature review is done also varies depending on the chosen approach (Ramalho, Adams, Huggard and Hoare, 2015).
Goals and Functions of a Literature Review

“The aim of literature review is to highlight what has been done so far in the field of interest and how your findings relate to earlier research.” (Cooper, 1989, p.34)

“Conducting a literature review is a means of demonstrating an author’s knowledge about a particular field of study, including vocabulary, theories, key variables and phenomena, and its methods and history.” (Randolph, 2009, p.2)

“It sets the broad context of the study, clearly demarcates what is and what is not within the scope of the investigation, and justifies those decisions. It should not only report the claims made in the existing literature but also examine critically the research methods used to better understand whether the claims are warranted.” (Boote and Beile, 2005, p.4)

Literature reviews serve several functions. Per Cooper (1989, p.35), they are: “provides theoretical background to your study or field of interest”, “helps justify how your findings are related to the body of knowledge in your field of research”, “establish the links between what your propose to examine and what has already been found. It helps you to refine your research methodology.” Per Rocco and Plakhotnik (2008, p.122), functions are: “to build a foundation”, “to demonstrate how a study advances knowledge”, “to conceptualize the study”, “to assess research design and instrumentation”, “to provide a reference point for interpretation of findings”.

Baumeister and Leary (1997) distinguish five main goals:
- theory development
- theory evaluation
- overview of the state of knowledge on a specific area
- problem identification
- historical development of theory and knowledge

Questions the review of the literature can answer (Hart, 1998, p.14):
- “What are the key sources?”
- “What are the major issues and debates about the topic?”
- “What are the political standpoints?”
- “What are the origins and definitions of the topic?”
- “What are the key theories, concepts and ideas?”
- “What are the epistemological and ontological grounds for the discipline?”
- “What are the main questions and problems that have been addresses to date?”
- “How is knowledge on the topic structured and organized?”
- “How have approaches to these questions increased our understanding and knowledge?”
Purposes of a Literature Review
(Baker, 2000; Baumeister and Leary, 1997; Cooper and Koenka, 2012; Davis, Mengersen, Bennett and Mazerolle, 2014; Denney and Tewskbury, 2013; Hart, 1998; Kuzhabekova, 2019; Meesala, 2014; Palmtai, Houston and Hulland, 2018; Randolph, 2009; Siddaway, 2019; Wallace, 2013)

Hart (1998, p.27) proposes a number of purposes:
1. distinguishing what has been done from what needs to be done;
2. discovering important variables relevant to the topic;
3. synthesizing and gaining a new perspective;
4. identifying relationships between ideas and practice;
5. establishing the context of the topic or problem;
6. rationalizing; the significance of the problem;
7. enhancing and acquiring the subject vocabulary;
8. understanding the structure of the subject;
9. relating ideas and theory to applications;
10. identifying the main methodologies and research techniques that have been used;
11. placing the research in a historical context to show familiarity with state-of-the-art developments.

Randolph (2009, p.2) cites a few roles:
- “delimitating the research problem”
- “seeking new lines of inquiry”
- “avoiding fruitless approaches”
- “gaining methodological insights”
- “identifying recommendations for further research”
- “seeking support for grounded theory”

Denney and Tewskbury (2013, p.218) propose a number of purposes:
- “it shares with the reader the results of other studies that are closely related to the study being reported”
- “it related a study to the larger, ongoing dialog in the literature about a topic, filling in gaps and extending prior studies”
- “it provides a framework for establishing the importance of the study”

Cooper and Koenka (2012, p.448) propose a number of purposes:
- “to summarize evidence from more than one research synthesis focused on the same or overlapping research problems or hypotheses”
- “to compare findings and resolve discrepancies in the conclusion drawn in more than one research synthesis focused on the same research problem or hypothesis”
- “to catalog the mediators and moderators of a revealed effect or relationship tested in research syntheses focused at the same research problem or hypothesis”
- “to identify gaps in the literature where multiple studies may exist on the same research problem or hypothesis but a research synthesis has not been performed”
- “to supplement existing research syntheses by including studies they did not include, either because the studies were omitted or appeared after the syntheses were conducted”
Palmatier, Houston and Hulland (2018) suggest several purposes of review papers:
- “Resolve definitional ambiguities and outline the scope of the topic.
- Provide an integrated, synthesized overview of the current state of knowledge.
- Identify inconsistencies in prior results and potential explanations (e.g., moderators, mediators, measures, approaches).
- Evaluate existing methodological approaches and unique insights.
- Develop conceptual frameworks to reconcile and extend past research.
- Describe research insights, existing gaps, and future research directions.”

Siddaway (2019, p.1) propose a number of purposes:
- establishment of progress on a particular problem
- identification of relations between variables
- identification contradictions and inconsistencies
- identification of gaps in the literature
- explore reasons for these gaps
- formulate general statements
- comment on, evaluate, extend or develop theory
- describe directions for future research

In summary, the purposes of a literature review are to understand the historical context (identification of main researchers in a research domain, problems) on a topic, examine the state of knowledge (definition of the core concepts, discovery of what has been done in the past and identification of gaps in previous research), specify the conceptual or theoretical dimensions (theories, generation of hypotheses) and get methodological insights (design, approaches, research methods, variables, justification of choices, statistical procedure). It serve in the development of the expertise of a researcher and in building a reference list.

Components of a Literature Review

Main components of a literature review from Zorn and Campbell (2006, p.176):
“1. An introduction that provides an overview of the focus and objectives of the review along with a thesis statement
2. A set of themes that categorize and make sense of the sources reviewed and develop the thesis (e.g. sources that support a particular position, those opposed, and those alternative views)
3. Explanations and evaluation of conclusions reached by key sources, and explanation of how they converge and diverge from the conclusions reached by other sources
4. Conclusions, reasonable speculations, and gaps that emerge after considering the sources as a whole”

“The components of literature review articles can be arranged in various ways - for example, by grouping research on the basis of similarity in the concepts or theories of interest, methodological similarities among the studies reviewed, or the historical development of the field. ” (American Psychological Association, 2020, p.8)
Approaches to Literature Review

Many approaches on a continuum could be underlined as suggested by Webster and Watson (2002), Massaro, Dumay and Guthrie (2016) and Snyder (2019) (see Tables 3, 4 and 5).

Table 3 - Approaches to literature review

<table>
<thead>
<tr>
<th>Concept-centric</th>
<th>Author-centric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept X ... (author A, author B, ...)</td>
<td>Author A ... (concept X, concept Y, ...)</td>
</tr>
<tr>
<td>Concept Y ... (author A, author C, ...)</td>
<td>Author B ... (concept X, concept W, ...)</td>
</tr>
</tbody>
</table>

Adapted from Webster and Watson (2002, p.xviii)

Table 4 - The literature review continuum

<table>
<thead>
<tr>
<th>Rapid review</th>
<th>Traditional authorship review</th>
<th>Narrative review</th>
<th>Research synthesis and meta-analysis</th>
<th>Systematic literature review</th>
<th>Structured literature review (SLR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No rules</td>
<td>Rigid rules</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adapted from Massaro, Dumay and Guthrie (2016, p.769)

Table 5 - Approaches to literature review

<table>
<thead>
<tr>
<th>Approach</th>
<th>Systematic</th>
<th>Semi-systematic</th>
<th>Integrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical purpose</td>
<td>Synthesis and compare evidence</td>
<td>Overview research area and track development over time</td>
<td>Critique and synthesize</td>
</tr>
<tr>
<td>Research questions</td>
<td>Specific</td>
<td>Broad</td>
<td>Narrow or broad</td>
</tr>
<tr>
<td>Search strategy</td>
<td>Systematic</td>
<td>May or may not be systematic</td>
<td>Usually not systematic</td>
</tr>
<tr>
<td>Sample characteristics</td>
<td>Quantitative analysis</td>
<td>Research articles</td>
<td>Research articles, books, and other published texts</td>
</tr>
<tr>
<td>Analysis of evaluation</td>
<td>Quantitative</td>
<td>Qualitative/Quantitative</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Examples of contribution</td>
<td>Evidence of effect Inform policy and practice</td>
<td>State of knowledge Themes of literature Historical overview Research agenda</td>
<td>Taxonomy or classification Theoretical model or framework</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adapted from Snyder (2019, p.334)
Types of Literature Review

Cooper (2003) suggests a taxonomy of literature reviews based on various characteristics (see Table 6). Various types of literature reviews are proposed in Table 7.

Table 6 - Taxonomy of literature reviews

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Research findings</td>
</tr>
<tr>
<td></td>
<td>Research methods</td>
</tr>
<tr>
<td></td>
<td>Theories</td>
</tr>
<tr>
<td></td>
<td>Practices or application</td>
</tr>
<tr>
<td>Goal</td>
<td>Integration</td>
</tr>
<tr>
<td></td>
<td>Generalization</td>
</tr>
<tr>
<td></td>
<td>Conflict resolution</td>
</tr>
<tr>
<td></td>
<td>Linguistic bridge building</td>
</tr>
<tr>
<td></td>
<td>Criticism</td>
</tr>
<tr>
<td></td>
<td>Identification of central issues</td>
</tr>
<tr>
<td>Perspective</td>
<td>Neutral representation</td>
</tr>
<tr>
<td></td>
<td>Espousal of position</td>
</tr>
<tr>
<td>Coverage</td>
<td>Exhaustive</td>
</tr>
<tr>
<td></td>
<td>Exhaustive with selective citation</td>
</tr>
<tr>
<td></td>
<td>Representative</td>
</tr>
<tr>
<td></td>
<td>Central or pivotal</td>
</tr>
<tr>
<td>Organization</td>
<td>Historical</td>
</tr>
<tr>
<td></td>
<td>Conceptual</td>
</tr>
<tr>
<td></td>
<td>Methodological</td>
</tr>
<tr>
<td></td>
<td>Thematic</td>
</tr>
<tr>
<td>Audience</td>
<td>Specialized scholars</td>
</tr>
<tr>
<td></td>
<td>General scholars</td>
</tr>
<tr>
<td></td>
<td>Practitioners or policy makers</td>
</tr>
<tr>
<td></td>
<td>General public</td>
</tr>
</tbody>
</table>

Source: Cooper (2003, p.4)
Table 7 - Types of literature reviews

<table>
<thead>
<tr>
<th>Type</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argumentative review</td>
<td>Discussion on findings in the literature to support or refute an argument</td>
</tr>
<tr>
<td>Evaluative review</td>
<td>Discussion evaluating the literature and focusing on contribution to knowledge</td>
</tr>
<tr>
<td>Exploratory review</td>
<td>Discussion exploring the literature and focusing on theory, empirical evidence and research methods to find gaps</td>
</tr>
<tr>
<td>Instrumental review</td>
<td>Discussion on findings in the literature on how to conduct research</td>
</tr>
<tr>
<td>Integrative review</td>
<td>Discussion integrating the literature and focusing on critiques and synthesis</td>
</tr>
<tr>
<td>Historical review</td>
<td>Discussion examining the literature and focusing on the historical context over a period of time</td>
</tr>
<tr>
<td>Meta-analysis</td>
<td>Discussion combining the results of other studies</td>
</tr>
<tr>
<td>Methodological review</td>
<td>Discussion examining the literature and focusing on research methods used</td>
</tr>
<tr>
<td>Narrative review</td>
<td>Discussion presenting the literature as a story</td>
</tr>
<tr>
<td>Systematic literature review (SLR)</td>
<td>Discussion examining the literature in a systematic, pre-specified, replicable and standardized manner and identifying, evaluating and integrating the literature</td>
</tr>
<tr>
<td>Theoretical review</td>
<td>Discussion exploring the literature and focusing on theory</td>
</tr>
</tbody>
</table>

Additional comments on some types:

**Integrative review**

Cooper (1982, p.291) “conceptualizes the integrative review as a research process containing five stages: (1) problem formulation; (2) data collection; (3) evaluation of data points; (4) data analysis and interpretation; and (5) presentation of results”. Table 8 from Cooper (1982) provides a summary of those five stages of research regarding research question, primary function, procedural differences that create variation in review conclusion and sources of potential invalidity in review conclusions.

Torraco (2005, p.363) proposes four forms of synthesis from integrative literature review, namely: a research agenda, a taxonomy or other conceptual classification of constructs, alternative models or conceptual frameworks, a metatheory; and a checklist. See also Whittemore and Knafl (2005) who discuss also the integrative review.
<table>
<thead>
<tr>
<th>Stage of research</th>
<th>Research question asked</th>
<th>Primary function in review</th>
<th>Procedural differences that create variation in review conclusion</th>
<th>Sources of potential invalidity in review conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem formulation</td>
<td>What evidence should be included in the review?</td>
<td>Constructing definitions that distinguish relevant from irrelevant studies</td>
<td>1. Differences in included operational definitions 2. Differences in operational detail</td>
<td>1. Narrow concepts might make review conclusions less definitive and robust 2. Superficial operational detail might obscure interacting variables</td>
</tr>
<tr>
<td>Data collection</td>
<td>What procedures should be used to find relevant evidence?</td>
<td>Determining which sources of potentially relevant studies to examine</td>
<td>Differences in the research contained in sources of information</td>
<td>1. Accessed studies might be qualitatively different from the target population of studies 2. People sampled in accessible studies might be different from target population of people</td>
</tr>
<tr>
<td>Data evaluation</td>
<td>What retrieved evidence should be included in the review?</td>
<td>Applying criteria to separate ‘valid’ from ‘invalid’ studies</td>
<td>1. Differences in quality criteria 2. Differences in the influence of nonquality criteria</td>
<td>1. Nonquality factors might cause improper weighting of study information 2. Omissions in study reports might make conclusions unreliable</td>
</tr>
<tr>
<td>Analysis and interpretation</td>
<td>What procedures should be used to make inferences about the literature as a whole?</td>
<td>Synthesizing valid retrieved studies</td>
<td>Differences in rules of inference</td>
<td>1. Rules for distinguishing patterns from noise might be inappropriate 2. Review-based evidence might be used to infer causality</td>
</tr>
<tr>
<td>Public presentation</td>
<td>What information should be included in the review report?</td>
<td>Applying editorial criteria to separate important from unimportant information</td>
<td>Differences in guidelines for editorial judgment</td>
<td>1. Omission of review procedures might make conclusions irreproducible 2. Omission of review findings and study procedures might make conclusions obsolete</td>
</tr>
</tbody>
</table>

Source: Cooper (1982, p.293)
Meta-analysis
See also Davis, Mengersen, Bennett and Mazerolle (2014), Field and Gillett (2010), Glass (1976), Rosenthal (1995), Shelby and Vaske (2008), Stanley (2001), and Stanley and Jarrell (1989) who discuss also the meta-analysis review.

Narrative literature review
See also Green, Johnson and Adams (2006) and Saunders and Rojon (2011) who discuss also the narrative literature review.

Systematic literature review (SLR)
See also Armitage and Keeble-Allen (2008), Davis, Mengersen, Bennett and Mazerolle (2014), Siddaway (2019), and Tranfield, Denyer and Smart (2003) who discuss also the systematic literature review (SLR).

Definition of Review articles

According to the American Psychological Association (2020, p.8):
“Literature review articles (or narrative literature review articles) provide narrative summaries and evaluations of the findings or theories within a literature base. The literature base may include qualitative, quantitative, and/or mixed methods research. Literature reviews capture trends in the literature; they do not engage in a systematic quantitative or qualitative meta-analysis of the findings from the initial studies. In literature review articles, authors should
- define and clarify the problem;
- summarize previous investigations to inform the reader of the state of the research;
- identify relations, contradictions, gaps, and inconsistencies in the literature; and
- suggest next steps in solving the problem.”
Phases and Steps to Prepare a Literature Review
(Baker, 2000; Boote and Beile, 2005; Cooper, 1989; 2003; Cooper and Koenka, 2012; Davis, Mengersen, Bennett and Mazerolle, 2014; Randolph, 2009; Snyder, 2019; Tranfield, Denyer and Smart, 2003; Wallace, 2013)

Several phases and steps could be described in preparation of a literature review. They are similar to a general problem solving approach and could be summarize as:
- Define the topic / theme and concepts
- Define the research question
- Design the review
- Search for literature and documentation
- Review, analyse and evaluate the literature
- Analyze and interpret
- Report the results

Steps per Hart (1998, p.32) and Baker (2000, p.221)
- Define the topic
- Think about the scope of the topic
- Think about outcomes
- Think about the housekeeping
- Plan the sources to be searched
- Search the sources listed

Steps per Cooper (1989, p.38):
1 “Search the existing literature in your research area of interest”
2 “Review the literature obtained”
3 “Develop a theoretical framework”
4 “Writing up the literature review”

Tranfield, Denyer and Smart (2003, p.214) proposes several stages ad phases:
Stage I - Planning the review
   Phase 0 - Identification for the need for a review
   Phase 1 - Preparation of a proposal for a review
   Phase 2 - Development of a review protocol
Stage II - Conducting a review
   Phase 3 - Identification of research
   Phase 4 - Selection of studies
   Phase 5 - Study quality assessment
   Phase 6 - Data extraction and monitoring progress
   Phase 7 - Data synthesis
Stage III - Reporting and dissemination
   Phase 8 - The report and recommendations
   Phase 9 - Getting evidence into practice
Cooper and Koenka (2012, p.449) proposes several steps:
- formulating the problem
- searching the problem
- gathering information from syntheses
- evaluating the quality of evidence
- analyzing and integrating the outcomes of syntheses
- interpreting the evidence
- presenting the results

Snyder (2019, p.336-337) suggests four phases and questions to consider in each phases of a literature review (see Table 9).

<table>
<thead>
<tr>
<th>Phases</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 designing the review</td>
<td>- Is this review needed and what is the contribution of conducting this review?</td>
</tr>
<tr>
<td></td>
<td>- What is the potential audience of this review?</td>
</tr>
<tr>
<td></td>
<td>- What is the specific purpose and research question(s) this review will be addressing?</td>
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<tr>
<td></td>
<td>- What is an appropriate method to use to this review’s specific purposes?</td>
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<tr>
<td></td>
<td>- What is the search strategy for this specific review? (including search terms, databases, inclusion and exclusion criteria, etc.)</td>
</tr>
<tr>
<td>2 conducting the review</td>
<td>- Does the search plan developed in phase one work to produce an appropriate sample or does it need adjustment?</td>
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<tr>
<td></td>
<td>- What is the practical plan for selecting articles?</td>
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<td></td>
<td>- How will the search process and selection be documented?</td>
</tr>
<tr>
<td></td>
<td>- How will the quality of the search process and selection be assessed?</td>
</tr>
<tr>
<td>3 analysis</td>
<td>- What type of information needs to be abstracted to fulfill the purpose of the specific review?</td>
</tr>
<tr>
<td></td>
<td>- What type of information is needed to conduct the specific analysis?</td>
</tr>
<tr>
<td></td>
<td>- How will reviewers be trained to ensure the quality of this process?</td>
</tr>
<tr>
<td></td>
<td>- How will this process be documented and reported?</td>
</tr>
<tr>
<td>4 structuring and writing the review</td>
<td>- Are the motivation and the need this review clearly communicated?</td>
</tr>
<tr>
<td></td>
<td>- What standards of reporting are appropriate for this specific review?</td>
</tr>
<tr>
<td></td>
<td>- What information needs to be included in the review?</td>
</tr>
<tr>
<td></td>
<td>- Is the level of information provided enough and appropriate to allow for transparency so readers can judge the quality of the review?</td>
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<tr>
<td></td>
<td>- The results clearly presented and explained?</td>
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<tr>
<td></td>
<td>- Is the contribution of the review clearly communicated?</td>
</tr>
</tbody>
</table>

Table 9 - Questions to consider in each phases of a literature review

Source: Snyder (2019, p.336)
Issues with Literature Reviews

Kennedy (2007, p.139) suggest some issues with literature reviews:
- “defining the boundaries of the literature”
- “distinguishing studies from citations”
- “distinguishing literature from lore”
- “deciding which reporting venues to include”
- “weeding out anomalous studies”

Josserand (2019, p.76-78) suggest some issues with literature reviews:
- “literature review is too broad”
- “literature review is too narrow”
- “catalogue effect” - “flat juxtaposition of existing references”
- “the right references, but ...” “do not describe with enough precision the contribution of your predecessors”
- “the mix of sources is not right” (academic vs professional)

Advices for Better Literature Review

Saunders and Rojon (2011) give some advices
- “identifies and includes the most relevant and significant research to the topic”
- “discusses and evaluates research”
- “identifies recognised experts”
- “contextualises and justifies your aim(s) and objective(s)”
- “consider and discuss research that supports and opposes your ideas”
- “justifies points made logically with valid evidence”
- “distinguishes between fact and opinion”
- “includes research that has been published since the start of the project”
- “references all sources fully”

Skills

Baker (2000, p.223) recognizes some required skills:
- time management
- organisation of materials
- computer use
- information handling
- online searching
- writing
Quality of a Literature Review

Snyder (2019) proposes a series of guidelines to assess the quality of a literature review (see Table 10).

Table 10 - Guidelines to assess the quality of a literature review

<table>
<thead>
<tr>
<th>Phases</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>designing the review</td>
<td>- Is relationship to the overall research field, is this literature review needed and does it make a substantial, practical, or theoretical contribution?</td>
</tr>
<tr>
<td></td>
<td>- Are the motivation, the purpose, and the research question(s) clearly stated and motivated?</td>
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<tr>
<td></td>
<td>- Does the review account for the previous literature review and other relevant literature?</td>
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<td></td>
<td>- Is the approach/methodology for the literature review clearly stated?</td>
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<tr>
<td></td>
<td>- Is this the most appropriate approach to address the research problem?</td>
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<tr>
<td></td>
<td>- Are the methodology and the search strategy clearly and transparently described and motivated (including search terms, databases, inclusion and exclusion criteria)?</td>
</tr>
<tr>
<td>conducting the review</td>
<td>- Is the search process appropriate for this type of review?</td>
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<td></td>
<td>- Is the practical search process accurately described and accounted for?</td>
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<td></td>
<td>- Is the process of the inclusion and exclusion of articles transparent?</td>
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<td></td>
<td>- Have proper measures been taken to ensure research quality?</td>
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<tr>
<td></td>
<td>- Can it be trusted that the final sample is appropriate and in concordance with the overall purpose of the review?</td>
</tr>
<tr>
<td>data abstraction and analysis</td>
<td>- Is the data abstracted from the article appropriate in concordance with the overall purpose of the review?</td>
</tr>
<tr>
<td></td>
<td>- Is the process for abstracting data accurately described?</td>
</tr>
<tr>
<td></td>
<td>- Have proper measures been taken to ensure quality data abstraction?</td>
</tr>
<tr>
<td></td>
<td>- Is the chosen data analysis technique appropriate in relation to the overall research question and the data abstracted?</td>
</tr>
<tr>
<td></td>
<td>- Is the analysis process properly described and transparent?</td>
</tr>
<tr>
<td>structuring and writing the review</td>
<td>- Is the review article organized coherently in relation to the overall approach and research question?</td>
</tr>
<tr>
<td></td>
<td>- Is the overall method of conducting the literature review sufficiently described?</td>
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<tr>
<td></td>
<td>Can the study be replicated?</td>
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<tr>
<td></td>
<td>- Is the result of the review reported in an appropriate and clear way?</td>
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<tr>
<td></td>
<td>- Does the article synthesize the findings of the literature review into a clear and valuable contribution to the topic?</td>
</tr>
<tr>
<td></td>
<td>- Are questions or directions for further research included? Are the results from the review useable?</td>
</tr>
</tbody>
</table>

Source: Snyder (2019, p.338)
Josserand (2019, p.79) proposes a checklist for a good quality literature review:
- “What are the main arguments?
- How are the arguments connected?
- Are the arguments supported by theoretical evidence?
- Are there some key areas of research and concepts missing?
- Is the storyline of the literature review coherent and logical?
- Is the knowledge gap logically based on the arguments?
- Is the knowledge gap justified?
- Is the research question/objective logically based on the arguments?
- Is the research question/objective justified?”

Grant and Booth (2009), Snyder (2019), Wallace (2013) propose some intrinsic qualities of literature review:
- accurate
- completeness
- comprehensiveness
- precise
- trustworthy
- recent or current literature
- objectivity
- persuasiveness
- value
Common Mistakes of a Literature Review

Baumeister and Leary (1997, p.316-320) suggest some mistakes:
- inadequate introduction
- inadequate coverage of evidence
- lack of integration
- lack of critical appraisal
- failure to adjust conclusions
- blurring assertion and proof
- selective review of evidence
- focusing on the researchers rather than the research
- stopping at the present

Baumeister (2013, p.125-130) suggest some errors:
- uncertain purpose
- vague introduction, poor organization
- not enough information
- failing to connect to take-home message
- be critical
- exceptions and counterexamples
- tell them where to go
- matters of style

Mistakes per Randolph (2009, p.11):
- “does not clearly relate the findings of the literature review to the researcher’s own study”
- “does not take sufficient time to define the best descriptors and identify the best sources to use in review literature related to one’s topic”
- “relies in secondary sources rather than on primary sources in reviewing the literature”
- “uncritically accepts another researcher’s findings and interpretations as valid, rather than examining critically all aspects of the research design and analysis”
- “does not report the search procedures that were used in the literature review”
- “reports isolated statistical results rather than synthesizing them by chi-square or meta-analytic methods”
- “does not consider contrary findings and alternative interpretations in synthesizing quantitative literature”

Cooper (1989, p.41) identifies some weaknesses:
- “a mere description of various materials without making an effort to show the relation between the studies and main objectives of the research topic”
- “cut and paste, which should not be encouraged”
- “original works should be cited and quoted”
- “not critically evaluated”
References


Statistical Psychology, 63(3), 665-694.
Kuzhabekova, A. (2019). Demystifying Literature Review, presentation at CREWW, Sprott School of Business, Carleton University, October 30, 27 slides.


