Research project: literature review

What is a literature review?

Literature = scholarly publications which have been written on a particular topic, such as journal articles, research reports, government reports and text books.

The review = the careful selection of literature relevant to your topic and the presentation, interpretation, classification and evaluation of this literature.

Why do a literature review?

Your literature review becomes an essential link in your research project:

- The literature review provides the reader with all the important background information needed to understand your project.
- It places your project as one link in a chain of research that is developing knowledge in your field.
  - To understand where you are going, it is important to understand what came before you.
- It demonstrates to the reader that you are aware of up-to-date and important knowledge on your topic.
- It may also be used to justify or provide a rationale for your research question, your research framework or your methodology.

A literature review is NOT ...

- An annotated bibliography
  - In an annotated bibliography the writer presents a summary and critical evaluation of each article or scholarly resource, one by one.
  - There little or no connection made between the various articles or resources.
- An essay
  - Essays and literature reviews have a very different purpose and require different approaches.
  - In an essay a student is given a topic to discuss or a question to answer and the writing is organised around responding to that topic or question.
  - The essay progresses in a linear way, where the student presents his/her first point, followed by an explanation which is supported by the literature.
  - The student then moves on to the second point and so on.
  - So in an essay the literature has a supporting role, whereas in a literature review it is the literature itself which is the subject of discussion.
In the literature you **WILL NOT** ...
- answer a question

In the literature you **WILL** ...
- identify a gap in existing knowledge, that is, you will identify what we still need to know about this topic or issue
- **POSE** a question related to this gap. This will be your research question.
- compare and contrast different authors’ views on an issue
- note areas in which authors are in disagreement
- highlight gaps
- or identify any particular shortcomings of past research

In this way your literature review becomes a critical discussion of the knowledge or ideas related to your research topic

**Structure of the literature review**
The body of your literature review will be organised in a way that best suits your topic
- **Historically/chronologically** - if you are looking at the evolution of a concept or practice over time or evaluating whether a concept from 20 years ago holds up today, then a historical or chronological organization might be appropriate.
- **Research questions** - some writers organise their literature review around the research questions.
- **Themes** - a very common way to organise the literature is according to key themes which emerge from the literature in relation to your topic.

**Organising your literature**
You must demonstrate that you went about your literature review in a systematic and rigorous way. You can include diagrams or tables to show how you have organised your literature.

**Example**
- The author has summarised the large amount of literature on their topic into a table.
- He/she has categorised the literature according to principles of sustainable construction.
- As the author noted in his/her report, this table allowed for the identification of areas the literature *has* focused on, and any *gaps*. Also, it allowed for the examination of similarities and differences in the literature.
- Further, the table provided a structure for the presentation of the literature review which followed.
<table>
<thead>
<tr>
<th>Author</th>
<th>Principles</th>
</tr>
</thead>
</table>
| Vale & Vale (1991)            | • Conserve energy: a building should be constructed so as to minimise the need for fossil fuels to run it  
                              | • Work with climate: buildings should be designed to work with climate and natural energy sources  
                              | • Minimise new resources: a building should be designed so as to minimise the use of new resources and, at the end of its useful life, to form the resources for other architecture  
                              | • Respect for users: a green architecture recognizes the importance of all the people involved with it  
                              | • Respect for site: a building will “touch this earth lightly”  
                              | • Holism: all the green principles need to be embodied in a holistic approach to the built environment |
| Kibert (1994a)                | • Minimise resource consumption  
                              | • Maximise resource reuse  
                              | • Use renewable or recyclable resources  
                              | • Protect the natural environment  
                              | • Create a healthy, non-toxic environment  
                              | • Pursue quality in creating the built environment |
| Royal Australian Institute of | • Maintain and restore biodiversity |

<table>
<thead>
<tr>
<th>Author</th>
<th>Principles</th>
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</table>
| Architects (1996)             | • Minimise the consumption of resources  
                              | • Minimise pollution of air, soil and water  
                              | • Maximise health, safety and comfort of building users  
                              | • Increase awareness of environmental issues |
| Abidin & Pasquire (2005)      | • Show concern for people by ensuring they live in a healthy, safe and productive built environment and in harmony with nature  
                              | • Safeguard the interests of future generations while, at the same time, meeting today’s needs  
                              | • Evaluate the benefits and costs of the project to society and environment  
                              | • Minimise damage to the environmental and its resources  
                              | • Improve the quality of buildings and services and promote social cohesiveness  
                              | • Use technology and expert knowledge to seek information and in improving project efficiency and effectiveness  
                              | • Legislate compliance and responsibility |
| Tan et al. (2011)             | • Comply with different governmental sustainability legislations, including environmental requirement and social responsibility, to improve business competitiveness  
                              | • Improve the project’s whole life value through green design and the promotion of best practice construction procurement throughout the supply chain |

(Li 2012, p. 20-21)
Writing up your literature review

A brief introduction:
- The decision to include a brief introduction to your literature review will depend on the topic area, length of the project report and any instructions or template provided by your lecturer.
- The length of the introduction will depend on the word requirement for your research project report or paper. It could be just a couple of sentences or it could be several paragraphs.
- Inform the reader of the purpose or focus of the section and to sign post to the reader what is coming up in this section.
- Link the literature review to other sections of your research project, such as your research questions and research methodology.
- You may want to also inform the reader of how you went about the process of conducting the literature review so that the reader can be assured of the rigour of your process.

Sample introduction:

| The literature review presented in this chapter situates the research topic in the existing body of knowledge. A review of the literature confirms the importance of project waste management in the construction industry. It provides an understanding of the waste management issues in both construction projects and office building retrofit projects. The performance of small and medium enterprises (SMEs) is also discussed to identify potential areas for improvement. The findings from the literature review help identify the research gaps and form the basis of the research design in the following chapter. Firstly, the need for <deleted text> is established. This is followed by an overview of <deleted text>. After that, the characteristics of <deleted text> are studied and specific issues of <deleted text> are discussed. Finally, the importance of <deleted text> and <deleted text> are explored. |
| Context, setting the scene, linking to the purpose or need for this research project |
| Connection to other sections of research project Outline, structure of the literature review |

(Adapted from Li 2010, p. 19)

**NOTE:** sections of this sample introduction have been intentionally deleted
The body sections:

- Lead the reader through your various ideas and understandings.
- Have clear sections and subsections to your literature review.
- Ensure that each paragraph has one clear idea.
- Begin your paragraphs with a topic sentence which tells the reader the focus of the paragraph.
- As you draw on the literature, reference the sources by using in-text references.
- Use sign posting, transitioning and linking language to connect ideas and to move from one paragraph to the next, for example:
  - to situate one idea from the literature against another – *meanwhile, in contrast, however, therefore, importantly*
  - to show analysis and evaluation of the literature – *significantly, therefore, as a result, seems to indicate, yet*
- Use objective language, that is do not use ‘I’ or ‘we’:
  - focus on the information or action, not the person doing the action
  - this gives the writing a more formal, authoritative tone and this style is more suitable for academic writing
  - one technique is to use the **passive voice**
- Finish with a concluding sentence which presents your interpretation of the literature and highlights the significance of the information as it relates to the topic

Sample body section:

**Small and medium enterprises (SMEs) are the relevant stakeholder group exposed to on-site waste generation. It is estimated, for example, that as much as 90% of construction work is carried out by a variety of small subcontractors while the large main contractor tends to focus on management and coordination (Briscoe et al. 2001; Khalid et al. 2006; Saunders & Wynn 2004). The improvement of their performance will enhance the effectiveness and efficiency of waste management throughout the project (Li et al. 2010). In fact, SMEs have strong willingness to participate in project waste management. A survey conducted to explore the attitudes of the subcontractors, *text deleted* strongly agreed that the waste management system in the project will result in a cleaner and safer site (Queensland Government EPA 2002). Therefore, SMEs need to take responsibility for waste planning and management through integration with project delivery and within their capability scale.**

(Adapted from Li 2010, p. 6)
Concluding your literature review:
- Summarise the main focus of the literature review.
- Highlight the gap in the literature.
- Make a connection between your literature review and your research questions.

Sample conclusion:

The review of the literature pertinent to this study revealed that construction waste planning and management is confirmed to be necessary and important for the construction industry. Existing research and current practices also highlight <text deleted>. Previous research has achieved a consensus that SME performance in waste management needs to be improved.

However, current waste management systems only deal with waste that is already generated <text deleted>. Further, existing research has not produced knowledge that can guide <text deleted>. To address these issues, the specific waste generation process in office building retrofit projects with particular waste factors needs to be identified <text deleted> and models need to be developed. Based on these issues, this project seeks to address the following research question:

- How can SMEs improve waste management practices through stakeholder collaboration and organisational engagement?

(Adapted from Li 2010, p. 6)

Grammar

Your job as the writer is to explore past research and ideas and theories related to your topic and then present your interpretations or evaluations of this literature. One way in which we situate research, ideas and theories is through the use of grammar.

<table>
<thead>
<tr>
<th>Verb tense</th>
<th>Purpose/function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple present tense</td>
<td>used when talking about an idea or theory that is constant</td>
</tr>
<tr>
<td>Simple past tense</td>
<td>to describe actions or events in the past that are completed</td>
</tr>
<tr>
<td>Present perfect tense</td>
<td>to describe actions or events in the past that are connected to the present</td>
</tr>
</tbody>
</table>
Passive voice | to focus on the action, rather than the person doing the action; it is understood or implied who is doing the action without stating this

Example of grammar:

Flame and heat propagation into the passenger compartment are deadly occurrences and have been investigated by a number of researchers. According to one study, in nearly two thirds of vehicle fire deaths, the swift advance of fire and the ensuing incapacitation of passengers were contributing factors (United States Fire Administration 2002). In a full scale vehicle test, the engine compartments took between 10 to 25 minutes to reach full involvement (Santrock n.d.; Tewarson, Quintiere & Purser 2007). Once the engine compartment was fully involved, flames spread into the passenger compartment in as little as one to six minutes, resulting in occupant death in 1 to 3 minutes due to the coinciding effects of heat, burns, and toxic gases (Tewarson, Quintiere & Purser 2007). These results should be considered in relation to emergency response times. For example, in rural accidents, it could take more than half an hour before an emergency response team arrives (Bahouth 2004).

<table>
<thead>
<tr>
<th>Simple present</th>
<th>Present perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple past</td>
<td>Simple past</td>
</tr>
<tr>
<td>Simple past</td>
<td>Passive voice</td>
</tr>
<tr>
<td>Simple present</td>
<td></td>
</tr>
</tbody>
</table>

Additional resources:

For resources on referencing (including UniSA Harvard and APA referencing styles) and academic integrity, go to UniSA’s referencing website.

(Adapted from Patronik 2008, p. 9)

References


Patronik, EA 2008, An analysis of vehicle fires and potential methods to reduce their severity through more stringent material standards, ProQuest, UMI Dissertations Publishing.