Writing a literature review

This resource provides you with tips and guidelines for researching and writing a literature review.

What is a literature review

In many university courses, students need to write literature reviews as part of their studies. A literature review is:

- a review of the writings, or literature, on a particular subject / topic
- a review of the most relevant, recent and scholarly work in the subject / topic area
- a piece of writing that **supports, evaluates and critiques your research topic.**

What a literature review is not

- A literature review is **not** just a summary of articles, texts or journals.

A literature review is **not** an analytical, opinionative or argumentative essay.

Purpose of a literature review

The purpose of a literature review is to:

- establish a theoretical framework for your topic / subject area
- define key terms, definitions and terminology
- identify studies, models, case studies etc supporting your topic
- define / establish your area of study, ie your research topic.

The three key points of a literature review

- Tell me **what** the research says (theory).
- Tell me **how** the research was carried out (methodology).

- Tell me what is missing, ie the **gap** that your research intends to fill

Researching your topic

To produce a good literature review you must show that you have researched and read widely. This section will take you through the key processes of researching your literature review.

Step 1 - reading with & for a purpose

Reading with and for a purpose helps you to quickly locate, evaluate and read relevant research. There are two stages in this process.

First stage

Look at the structure of the text, eg the Table of Contents, the Abstract, headings and sub-headings, to see if the text is suitable for your purpose. This will help you to locate relevant research quickly.

Second stage

If the text appears to be relevant for your purposes, then you can read it in-depth to find specific research to support your literature review.

These techniques enable you to identify appropriate material by reading widely and to gain a broad understanding of the available literature on your topic.

Objectivity

You must be objective in your research. Remember the reason you are reading is to be able to give an evaluation and critique of the literature chosen. Do not just select the parts of the literature that agree with what you think is right.

Step 2 - evaluating your readings

It is important to critically evaluate your readings to establish their relevance and credibility for your research topic. After all, you are basing your theoretical framework and your literature review on what you have read.

Here is a check list of critical questions to keep in-mind when you evaluate your readings:

Authority

- Who conducted the research?
- Is the author an authority in their field of study?
- What evidence is there to support this?

Researchers can find information from many sources, eg volumed journals to company reports. At all times, you must check the authority of who has written the research. The Internet has given people access to huge amounts of information. Some of this is valid, other parts are not. You cannot simply accept that all information / research available on the Internet, eg through Google, is valid. Many university libraries, such as the RMIT library, subscribe to online, referenced journals which provide current academic writings. These are not always available through Google.

Validity (of research & sources)

- Where has this research come from?
- Is it from a valid source, eg an educational institution?
- Is it peer reviewed or been passed by an editorial panel, eg is it in a refereed journal?
- If it is from a website, does it contain details of author, is it from a *.edu* site, does it have a publication date?

Many libraries, including the RMIT library, have access to electronic journals and databases. These contain qualified, academic writings. Be careful of doing a google search that brings up unqualified sites.

Accuracy

- What is the literature about?

- Is the literature accurate and how do you know? One way to find out is to check if the same research is referred to in other sources, or is it inconsistent with other findings?
- What makes the literature believable? Is the literature from credible sources, see validity.

Objectivity

- Is there evidence of bias in the article? For example, would you trust research from a cigarette manufacturer claiming that smoking does not damage your health?
- Do the statistics match those in other publications? If not, is the argument (method, research design etc) on which they are based convincing?
- How do you know the data is true? What other supporting data is there?

Currency

- What is the publication date of the material?
- Is it likely that more current information is available?
- Have you found any more recent research that casts doubt upon or refutes some findings?
- Have you checked for more recent information / research? It is advisable to have some references that are current.

Coverage

- Is the information complete? Based on your research so far, does the information appear to cover the area being studied?
- What is the sample size? Is it adequate?
- Is there any further research that has not been mentioned or deliberately omitted from the findings?

Location

- In which country was the article written?
- Is this location relevant / important to your research?

Final check

When you have considered all the questions above, ask yourself:

- What does this all mean?

You are looking for the strengths and weaknesses in what you have read to produce a critical and sound literature review.

Step 3 - summarising, analysing & organising your readings

It is important that you make notes as you read. You should think about and include the following in your notes.

- What are the main points / theories / key issues raised in the text, eg book or article?
- Summarise the main points the writer is making.
- Take details of any quotes, or page references that you think may be good to use in your literature review.
- Make sure you keep track of all bibliographic information, eg author, date, title of book, publisher / journal, page numbers etc. For further information see *Guidelines for presentation of written work.*
- Note the way the author has used the original material. If you have copied the author's words directly, make sure you place them in quotation marks and cite the page number.
- What is the author's stated or implied purpose?
- What conclusions has the author made?
- What points support the conclusions?

It is also useful to write down your own thoughts on / about the readings. These are useful when you revisit the notes and / or use them in your writings.

Step 4 - analyzing & organizing your summaries and notes

Use your summaries and notes to identify relationships and links in the research literature.
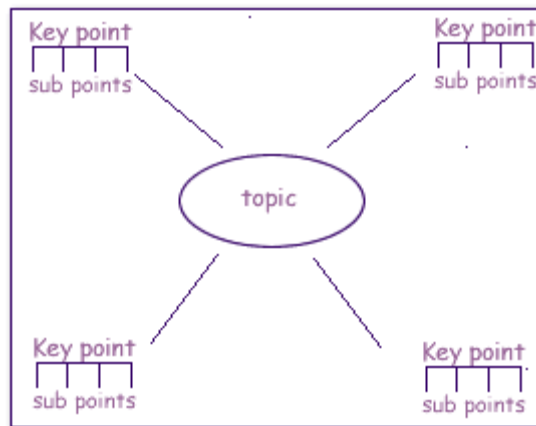
You should now be able to identify:

- similarities and differences between various authors and their research
- what research agrees and disagrees?
- what major questions remain unanswered?
- what are the possible directions for future research?

Organizing your summaries

To organize your research, cluster similar research together, e.g what information is similar or different. A useful technique for doing this is to draw a mind map and organize the research into major points under each theme.
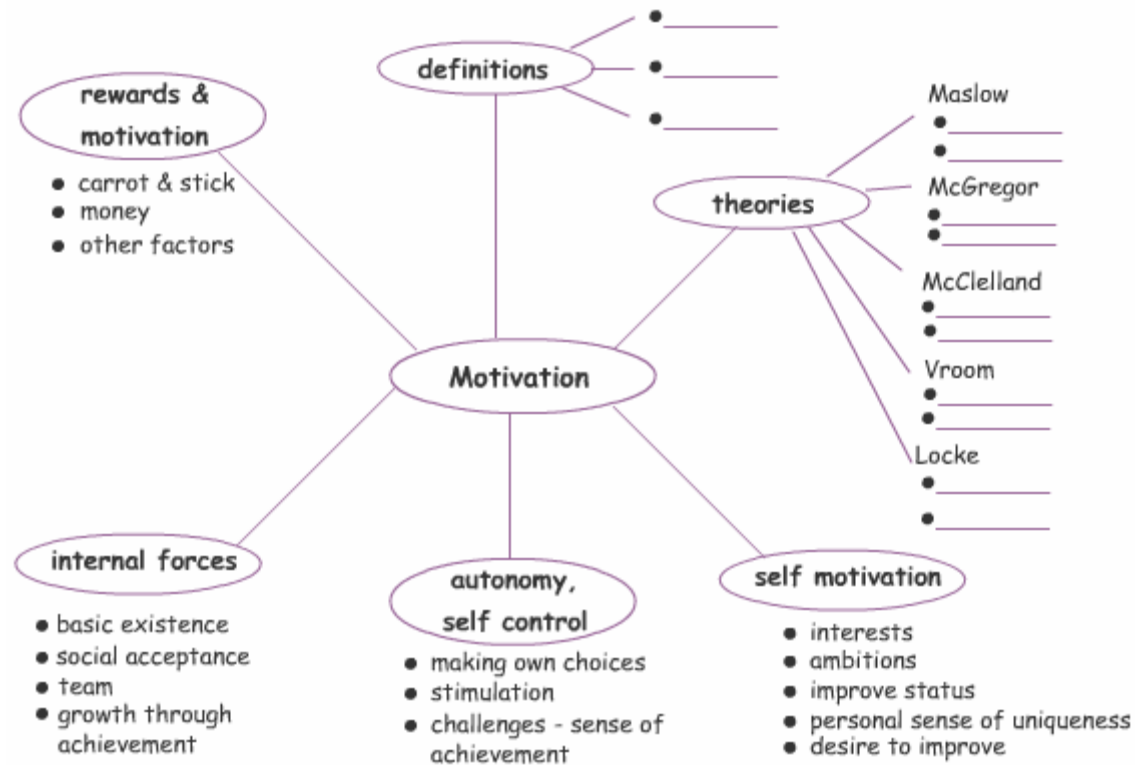
Structure & planning your writing - mindmaps

Mindmaps are a visual map to link and organise key concepts of your research. They also show links and relationships between ideas. Sometimes it is a good idea to number key ideas in the order that you are going to place them in your literature review.

Example of a mindmap

Here is an example of a mindmap on motivation.

definitions

rewards &
motivation
- carrot & stick
- money
- other factors

theories

Maslow

McGregor

McClelland

Vroom

Locke

Motivation

internal forces
- basic existence
- social acceptance
- team
- growth through
  achievement

autonomy,
self control
- making own choices
- stimulation
- challenges - sense of
  achievement

self motivation
- interests
- ambitions
- improve status
- personal sense of uniqueness
- desire to improve

Writing your literature review

Writing your literature review takes time. You may need to complete several drafts before your final copy. It is important to have a good introduction that clearly tells the reader what the literature will be about.

An introduction must tell the reader the following:

- **what** you are going to cover in the review
- the **scope** of your research
- **how** the review ties in with your own research topic.

Introduction

This is a good example of an introduction because it has a topic sentence which indicates what will be covered and also tells the reader the specific focus of the literature review in the concluding sentence.

Topic sentence - identifies five major themes as the scope of this review

Many theories have been proposed to explain what motivates human behaviour. Although the literature covers a wide variety of such theories, this review will focus on five major themes which emerge repeatedly throughout the literature reviewed. These themes are: incorporation of the self-concept into traditional theories of motivation, the influence of rewards on motivation, the increasing importance of internal forces of motivation, autonomy and self-control as sources of motivation, and narcissism as an essential component of motivation. Although the literature presents these themes in a variety of contexts, this paper will primarily focus on their application to self-motivation.

5 major themes to be covered

Concluding sentence - specific focus

Lecturer's comments

Notice how the student has clearly said WHAT she will cover in this review. This is particularly important in a large topic area.

Paragraphs

A paragraph is a group of connected sentences that develop a single point, argument or idea. Paragraphs need to link to other paragraphs so that the themes, arguments or ideas developed are part of a coherent whole rather than separate bits.

A paragraph should include:

- a main statement / idea that you are putting forward, ie topic sentence
- evidence from research to support / argue your idea, showing where the writers agree and / or disagree
- student analysis of the research literature **where appropriate**
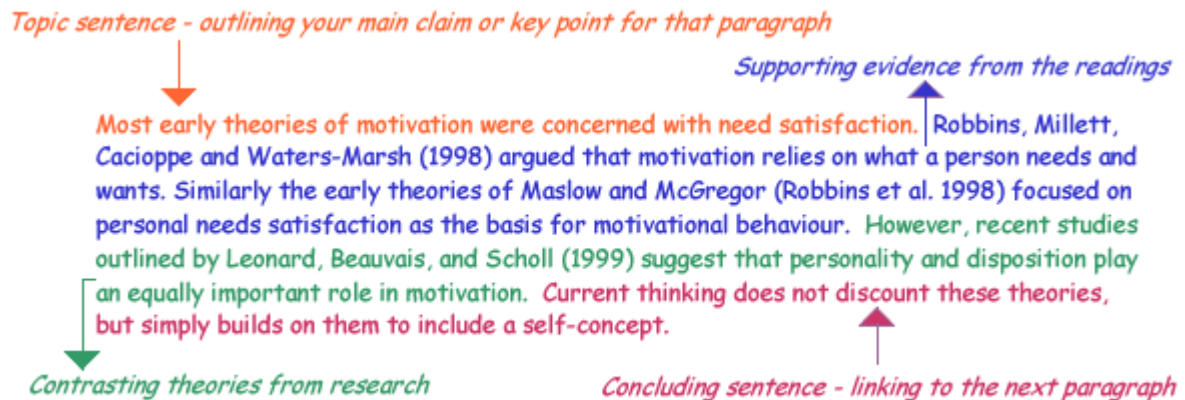- summing up and linking to the next idea (paragraph).

In the literature review, you will need to show evidence of integrating your readings into each paragraph and analysis of the readings where necessary.
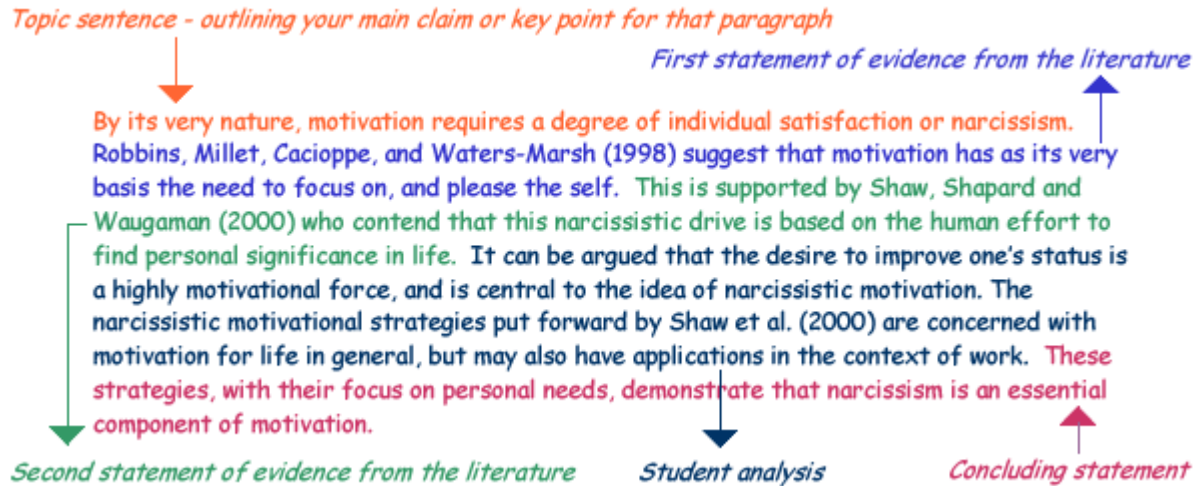
Integrating arguments in paragraphs

Integration of multiple sources

To develop an integrated argument from multiple sources, you need to link your arguments together. The model below is a guide.

Topic sentence - outlining your main claim or key point for that paragraph

Supporting evidence from the readings

Most early theories of motivation were concerned with need satisfaction. Robbins, Millett, Cacioppe and Waters-Marsh (1998) argued that motivation relies on what a person needs and wants. Similarly the early theories of Maslow and McGregor (Robbins et al. 1998) focused on personal needs satisfaction as the basis for motivational behaviour. However, recent studies outlined by Leonard, Beauvais, and Scholl (1999) suggest that personality and disposition play an equally important role in motivation. Current thinking does not discount these theories, but simply builds on them to include a self-concept.

Contrasting theories from research

Concluding sentence - linking to the next paragraph

Integration of student analysis

It is important to integrate your analysis and interpretation of the literature in your literature review. Read the following paragraph and see how the arguments have been integrated into the paragraph along with student analysis. Analysis is not just student opinion, it needs to be supported by the literature.

Topic sentence - outlining your main claim or key point for that paragraph

First statement of evidence from the literature

By its very nature, motivation requires a degree of individual satisfaction or narcissism. Robbins, Millet, Cacioppe, and Waters-Marsh (1998) suggest that motivation has as its very basis the need to focus on, and please the self. This is supported by Shaw, Shapard and Waugaman (2000) who contend that this narcissistic drive is based on the human effort to find personal significance in life. It can be argued that the desire to improve one's status is a highly motivational force, and is central to the idea of narcissistic motivation. The narcissistic motivational strategies put forward by Shaw et al. (2000) are concerned with motivation for life in general, but may also have applications in the context of work. These strategies, with their focus on personal needs, demonstrate that narcissism is an essential component of motivation.

Second statement of evidence from the literature   *Student analysis*   *Concluding statement*

Verbs for referencing

To incorporate quotations / references into a literature review, you can use a variety of verbs. These verbs are often used with prepositions, eg that, by, on. It is poor writing to use the same ones all the time, eg says that, states that. Verbs also allow the writer to indicate the degree to which they support the author of the research, eg claims that versus argues that. The following verbs (and prepositions) can be used to introduce references into your literature review. Please note that they can be used in different tenses.

Verbs	
Suggest (that)	Recent studies outlined by Leonard et al (1999) **suggest that** personality and disposition play an equally important role in motivation.
Argue (that)	Leonard et al (1999) **argue that** there are three elements of self perception.
Contend(s)	Mullens (1994) **contends that** motivation to work well is usually related to job satisfaction.
Outline	Recent studies **outlined** by Mullins (1994) suggest that personality and disposition play an equally important role in

	motivation.
Focus on	The early theories of Maslow and McGregor (Robbins et al, 1998) **focused on** personal needs and wants as the basis for motivation.
Define(s)	Eunson (1987, p. 67) defines motivation as 'what is important to you'.
Conclude(s) (that)	Reviewing the results of the case study, Taylor (1980) **concludes that** the theories of job enrichment and employee motivation do work.
State	He further **states** that there is an increasing importance on the role of autonomy and self regulation of tasks in increasing motivation.
Maintains (that)	Mullins (1994) **maintains that** job enrichment came from Herzber's two factor theory.
Found (that)	Mullins (1994) **found that** there is an increasing importance on the role of autonomy and self regulation of tasks in improving motivation.
Promote(s)	This **promotes** the idea that tension and stress are important external sources of motivation, which can be eliminated by completing certain tasks.
Establish(ed) (by)	As **established by** Csikszentmihalyi (Yair 2000, p. 2) 'the more students feel in command of their learning, the more they fulfil their learning potential'.
Asserts (that)	Locke's Goal Setting Theory **asserts that** setting specific goals tends to encourage work motivation (Robbins et al, 1998).
Show(s)	Various theories of motivation **show** employers that there are many factors that influence employees work performance.
Claim(s) (that)	Hackman and Oldham (1975) **claim** that people with enriched jobs, and high scores on the Job Diagnostic Survey, experienced more satisfaction and motivation.
Report(s)	Mullins (1994) **reports** on four content theories of motivation.

Mention(s)	Mullins (1994) **mentions** two common general criticisms of Herzberg's theory.
Address	Redesigning jobs so that responsibility moved from supervisors to the workers, was an attempt to address the issues of job satisfaction (Mullins, 1994).

Referencing as evidence

You are required to reference your sources as evidence of your academic integrity. Failing to cite your sources is plagiarism.

Referencing is very important when:

- paraphrasing and summarising the ideas / words / works of others
- quoting directly from a source.

You must follow the instructions in your Course Guide on the required method of referencing.

Poor writing in a literature review

Poor writing in a literature review is often the result of failing to integrate arguments into the review. Many people make the mistake of simply summarising their readings. Look at the following example of poor writing.

Example - poor writing

Avoid using words like 'are reported'. These types of words often lead to descriptive writing. Click on 'Show' to see how their findings have been reported.

During the past decade, many researchers have shown interest in motivation. Their findings are reported here. Smith (1995) developed a model investigation conducted on...(next paragraph describes Smith's model)...Jones (1998) asserts that...(following paragraph says what Jones asserted)...Hoey (1998) makes a clear distinction between...(following paragraph states what Hoey says)...

All this does is leads to paragraphs that just describe, not critically synthesise and evaluate.

The student here has simply reported each author's theory without any analysis or integration.
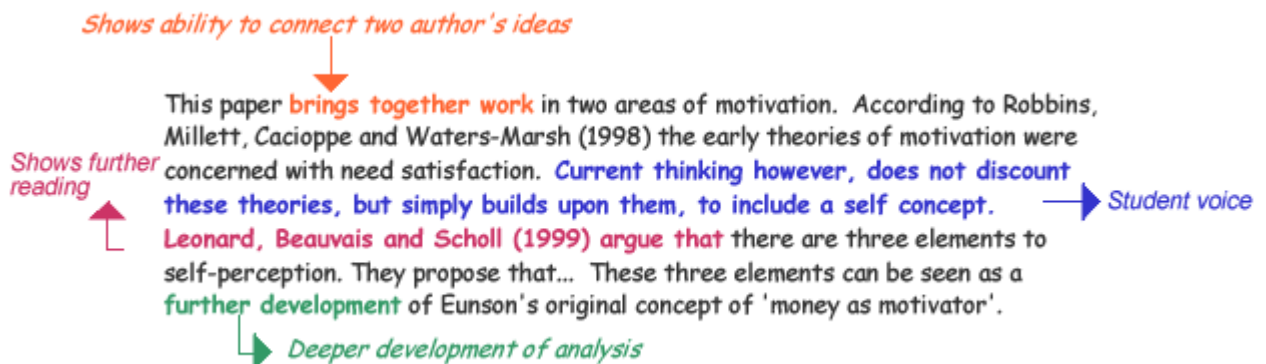
Remember what a literature review is not.

- A literature review is **not** just a summary of articles, texts or journals.
- A literature review is **not** an analytical, opinionative or argumentative essay.

Good writing in a literature review

The following information is an example of good writing in a literature review because:

- it integrates the research of various authors
- it shows similarities and differences of ideas
- it shows wide reading
- it shows analysis and critical evaluation of what the student has read.

Analysis of a paragraph

Shows ability to connect two author's ideas

This paper brings together work in two areas of motivation. According to Robbins, Millett, Cacioppe and Waters-Marsh (1998) the early theories of motivation were *Shows further reading* concerned with need satisfaction. Current thinking however, does not discount these theories, but simply builds upon them, to include a self concept. → *Student voice* Leonard, Beauvais and Scholl (1999) argue that there are three elements to self-perception. They propose that... These three elements can be seen as a further development of Eunson's original concept of 'money as motivator'.

Deeper development of analysis

Conclusion

Use the following criteria as guidelines for your literature review.

1. **Traps to avoid in the literature review**

   - Try not to read everything
   - Reading but not writing
   - Not keeping bibliographical information
   - Incomplete referencing (paraphrases, summaries and direct quotes)

2. **What makes a good literature review**

   - The selection of literature chosen for review
   - The criticism of the literature
   - The interpretation of the literature

3. **Selection of literature**

   - Have you read widely?
   - Is the purpose of the review clearly identified?
   - Does your writing include clear definitions and identify the limits of the research?
   - Does the review focus on the most recent developments / research for that topic?
   - Does the review make use of primary sources?

4. **Criticism of the literature**

   - Is there a logical flow to your writing?
   - Is the structure of your review clearly stated?
   - Have you demonstrated that you have read widely as well as focused on your specific topic of research?
   - Have you focused on current / most relevant issues?

5. **Interpretation**

   - Have you interpreted / evaluated what you have read?
   - Is there an obvious gap in the research / literature?
   - Have you used the literature to create your own interpretation of the research?

6. **Key assessment criteria**

- What the student has read
- How the student has organised the review / writing of this
- How the student has interpreted and evaluated this