

Getting Started with... *Your literature review*

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What makes a good literature review?

- > From **global** to the **specific**
- Start by the importance of the area
- Then place your research in context
- Then highlight gap(s) in knowledge...
- Leading to research questions and/or hypotheses
- Your aims and objectives



First make a contents page!

Titles		Pages
•	Introduction	2
•	Topic 1	3
	Sub topic 1 Sub sub topic	
	Sub topic 2Sub Topic 3	
•	Topic 2	2
	Sub topic 1	
	Sub topic 2	
•	Topic 3	1.5
	Sub topic 1	
	Sub topic 2	
	• Sub Topic 3	
•	Issues and unanswered Questions	1
•	Hypothesis/Aims /Objectives	1.5

Contents Page

• Good headings are essential

1. Heading <u>1.1 Sub Heading</u> 1.1.1 Sub Sub Head

- Plan until you know the topic for each paragraph
- Decide where you could add figures & tables
- Add figures to content page and allow 1/2 page
- Then make a note not to write what is in the figure but just refer to it.
- Remember how difficult it is to read full pages of text
- Show both Supervisors and **DISCUSS BEFORE WRITING**

What goes in each section of a Literature report?

Introduction

•OVERALL-The state of knowledge leading to your project

- Start off simple and outline the BIG PICTURE
- Give references for all statements
- Critically discuss previous work
- Discuss controversies and unanswered questions
- Discuss species, methods used if relevant
- Define hypotheses and aims

Techniques to help you with overall structure

- Mind maps
- Concept maps
- Brainstorming
- Post it notes
- Index cards





Reading the literature...

Where from?

- Pubmed or equivalent
- Key word search
- Ask supervisor for Top 10 refs
- Beware wikipedia!

Read refs and Group your info

Keep a note of the ref

Recording Reference

Use Endnote/Reference manager -save all refs in this format

Harvard System Author(s), date, title, journal, ref

Alphabetical Scientist, A. 2015, Nature, <u>250</u>, 27-35



Reading a Paper - Shortcuts



Do's and Don'ts

- Don't start with the introduction
- Start with a Section that has straightforward facts



- Write and don't be tempted to check a reference-just put (Need to find...)
- It takes a lot of space to explain background so you may not have room for details in references
- If you read the reference you will add lots of detail and it will take a long time and you will look for other references for specifics
 2 hours later you wen't have written your paragraph!
 - -3 hours later you won't have written your paragraph!!
- If you write too much and cut bits out -your supervisor will read it as disjointed.

Do's and Don'ts

• Do keep going back to your contents page

• Use it to stop bad habits creeping in

 Do start your abstract first and keep modifying-a polished abstract is worth a lot

Before you start

- Check the guidelines <u>first</u>:
 - How many pages
 - Font
 - Format of references etc
 - Does it need a contents page?



Essentials of a good paragraph

Unity

all sentences directly support one topic



Coherence

information is well-organised, logically ordered easy to follow

Difference between Aim and Objective?

Aim

- An intention or aspiration;- what you hope to achieve
- Aims are statements of intent:- written in broad terms

Objective

- A goal or step on the way to meeting the aim;- how you will achieve it
- Objectives use specific statements which define measurable outcomes.

Objectives should be S.M.A.R.T

- **Specific** be precise about what you are going to do
- Measurable you will know when you have reached your goal
- Achievable Don't attempt too much. A less ambitious but completed objective is better
- **Realistic** do you have the necessary resources to achieve the objective?
- **Time constrained** determine when each stage needs to be completed.

5 most common specific errors in academic writing

- 1. Imprecise referencing to previous sentences: 'This', 'These', 'It is' etc. Try to avoid these.
- 2. Reading like a textbook
- 3. Colloquialisms, non-formal writing
- 4. Lack of explicitness ('It is important...' –but not clear why!)
- 5. Redundancy of material (e.g. repetitiveness)
- ...And do use references to support <u>ALL</u> your assertions!

Tips:

- Thoroughly examine the introductions of studies in good publications in your field.
- If English is your second language, consider having it professionally proofread at an early stage to benefit your learning.

A closing thought.....

Writing reports is like driving (or sex)

- You think you can do it without instruction
- The results are often abominable
- Even the novice thinks they are good at it

BUT

- You get better at it the older you get
- There are lots of people to give you advice
- It can be fun or help your career prospects- when you get it right