

# Thesis writing

# Structure

#### **GENERAL GUIDELINES**

There is no one right way to structure a thesis; instead, the structure will be influenced by the discipline you are working within, the questions you pose, the methodology and theoretical frameworks you use, and the issues you want to cover. This resource outlines two very common thesis structures.

#### Common thesis structures

A common format (referred to here as "Type 1") has four main sections: Introduction, Methods, Results and Discussion. Theses that do not follow this structure ("Type 2") might vary a lot in the number of chapters and how they are labelled.

#### TYPE 1

The structure Introduction, Methods, Results and Discussion is used across a very wide range of disciplines. It can be used to report on anything from the simplest lab experiments to the longest and most complex, systematic research projects in the natural, health or social sciences, or engineering and computer studies (Sollaci & Pereira, 2004), where the emphasis tends to be on observation, experimentation, and strict, replicable protocols of data analysis.

Example: typical structure of a type 1 thesis	
Abstract	all theses have sections such as a title page, table of contents, list of figures and an acknowledgments page before the main sections
Introduction	the literature review may be part of the introduction or a separate chapter, depending on the amount of literature that needs to be discussed
Methods	
Results	in some disciplines, the results and discussion section are combined within the one chapter
Discussion	
Conclusion	
References	all theses have a reference list following the conclusion. They may also have an appendix

The rhetorical strategies that typically shape the structure of research papers, especially their introductions, has been extensively discussed in the research literature on academic writing, following Swales' description of how authors create a research space (Swales 1990).

## TYPE 2

This structure is widely used for theses in Humanities, Creative Arts, Education and Business, especially those that are discussing theories, issues and situations rather than experiments or other scientific approaches to data gathering and analysis.

#### Example: typical structure of a type 2 thesis

**Abstract** 

**General introductory** 

chapter

may or may not be named 'Introduction'

**Literature review** reviewing of relevant literature may be positioned as a separate chapter

and/or be positioned within introductions to individual chapters, depending

on the topics and complexity of discussion required

**Body chapter 1** each chapter may deal with a different topic and a range of sub-topics

**Body chapter 2** body chapters can be given titles that indicate their content or role in the

thesis; each body chapter includes its own introduction to the sub-topic, and a conclusion to the argument presented, and is explicitly linked to

Body chapter 4

**Concluding chapter** may or may not use the heading 'conclusion'

References

Body chapter 3

Each chapter in this thesis structure will typically include its own introductory section, definitions of terms and its own conclusion. Each chapter may also have its own literature review related to the particular issue or topic being discussed, although it is also common to place all literature review material into one chapter immediately after the introductory chapter.

To make sure that you gain a wider understanding of a possible structures for your thesis, you might:

- look at successful theses that have been produced within your discipline
- talk with your supervisor
- look at theses that have used similar research designs or models or methodologies to the ones you want to use, whatever discipline they might be from.

For more information about the structural requirements of a thesis, ask your faculty and look at examples in your discipline.

# Language features

Further details and text examples of each section can be found in other related resources, but note a few typical features of language:

#### **ABSTRACTS**

# Example: shifts in verb tense within an abstract

The yellow-bellied glider (Petaurus australis) **is** one of only a few mammal species that feed on plant and insect exudates. The research described in this thesis **aimed** to assess the importance of the diet on the behavioural ecology of the yellow-bellied glider. Gliders **were studied** in detail at two sites in New South Wales in quite different forest habitats ...

past tense refers to specific events that occurred once

This study **shows** that the extensive use of exudates by yellow-bellied gliders **has** a strong influence on their behavioural ecology. Exudates **display** a set of traits (a clumped spatial distribution, a continuous rate of renewal, can be quickly digested, have the potential to be available year-round and to be at times superabundant) which **produce** (i) an uncommon time-activity budget, (ii) a flexible mating system and (iii) apparent territoriality ...

present tense refers to anything generally, always and still true



#### **METHODS CHAPTERS**

The methodology chapter is usually written using past tense, eg "data were examined ...", as the data analysis was carried out before being written up in the thesis. Notice also in this example that the sentence is written in so-called 'passive' or indirect voice'. This choice is made to foreground what was examined rather than who did the examining.

#### **RESULTS CHAPTERS**

While past tense is typically used in the results section, present tense might also be used to describe what can now be interpreted from a table or graph, because this is an interpretation being made as the reader reads the text, for example:

- (a) "The sap of Eucalyptus viminalis accounted for 94% of the feeding observation time ...".
- (b) "Table 1 gives the number of days that the subjects used the drug"
- (c) "The data from the first study **show** differences in size when compared with study 2".

#### **DISCUSSION CHAPTERS**

Discussion sections might shift tense often, depending on whether the writer is making a general claim or reporting events that occurred at a particular time. Notice the changes in tense in the following example from a Biology thesis: present tense is used in finite clauses when making statements about how things are now - at any and every time of reading, while past tense is used to refer to the findings, as these are being reported as something established during the study, which is in the past for those reading the text now:

#### Example: shifts in verb tense within a discussion

Eucalypt sap, honeydew and manna **consist** mainly of various sugars and **contain** little or no protein (Basden 1965, 1966, Paton 1982, Stewart et al 1973); therefore, yellow-bellied gliders must harvest arthropods or pollen to meet their protein requirements. At Bombala, gliders **harvest** arthropods principally by peeling back loose shedding bark or by searching through hanging bark ribbons ...

For the present study, the harvesting of arthropods **accounted** for 23% of the total feeding observation time. ...

The low rates of renewal of arthropods (Smith 1982a, Henry 1985) probably **requires** that gliders must forage over large distances to meet their protein needs. At Bombala, gliders often **harvested** arthropods when gliding to major resource trees such as sap-site trees and manna trees. This **is** similar to the behaviour of some frugivorous primates which **supplement** their diet with arthropods harvested whilst moving between fruiting trees (Terborgh 1983).

present tense refers to anything generally, always and still true

past tense refers to specific events that occurred once

### **REFERENCES**

Sollaci, L B & Pereira, M G (2004), "The Introduction, Method, Results, and Discussion (IMRAD) Structure: A Fifty-year Survey", *Journal of the Medical Library Association*, vol 92, no 3, pp 364-367.

Swales, J M (1990) Genre Analysis: English in Academic and Research Settings, Cambridge University Press, Cambridge.

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